THIRD SERIES VOL 57 NUMBER 7 MAY 1950

THE JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

66 PORTLAND PLACE LONDON W1 · TWO SHILLINGS AND SIXPENCE

Rysbrack's statue of William III (1736) in Queen Square, Bristol. Photo Reece Winstone.

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The American Mission

The report has now been published of the team that went out to America in July 1949 to study the American building industry; to compare it with its British counterpart; and to draw conclusions likely to increase productivity in this country. The report brings into prominence that the British architect has much to learn from the American architect regarding the preparation of complete drawings, sub-contracts, and similar matters before the actual contract is placed; on the other hand, the United States building industry could with advantage study our bills of quantities system, which tends to facilitate fair and even tendering, and to effect a saving in cost, as one set of bills serves for all the contractors.

The price of the report which is issued by the Anglo-American Council on Productivity is 2*s.* 6*d.* but the Institute has a limited number of copies available for members who are particularly interested. These can be obtained from the Secretary and will be issued to members on application without charge until the supply is exhausted.

The Minister of Works, the Rt. Hon. R. R. Stokes, P.C., M.P., will take the chair at the meeting, announced in the April JOURNAL to be held at the Kingsway Hall on Friday 9 June at 7 p.m., at which the report of the Building Industry's Productivity Team will be discussed. The President, Mr. Michael Waterhouse, can not be present as he will be at the British Architects' Conference in Bristol, but the other architect member of the team, Mr. Robert H. Matthew [*A*], Architect to the L.C.C., will speak on behalf of architects. Mr. Robert O. Lloyd, O.B.E., President of the National Federation of Building Trades Employers and leader of the team will speak on behalf of builders and Mr. Frank W. Beazley on behalf of operatives. Part of the meeting will be given to questions and discussion which will be initiated by Mr. Richard Coppock, C.B.E. [*Hon. A*], General Secretary of the National Federation of Building Trades Operatives.

The Annual Reception

It is on ceremonial occasions that the R.I.B.A. building looks its best. It certainly did so on the evening of 28 April, when some 750 members and guests were received by the President and Mrs. Waterhouse at the fourth post-war annual reception.

All present seemed to agree that the party was a great success; from the beginning it took on an atmosphere of gaiety, though apart from the dancing and the popular puppet show, the attractions were distinctly those of a learned society. In these the Library played its usual part, the collection of unidentified drawings on view there attracting the gravely learned who, after inspecting the drawings and making suggestions as to their authorship, kept the Library staff busy producing for inspection some of its more rare and curious possessions.

Mr. S. T. E. Cusdin, O.B.E., A.A. Dipl. [*A*]

The A.A. President 1950–51

Mr. Sidney Thomas Edward Cusdin, O.B.E., A.A. Dipl. [*A*] has been nominated unopposed as President of the Architectural Association for the forthcoming session, the 104th, which begins on 1 June.

Mr. Cusdin received his architectural education at the Municipal School of Arts and Crafts, Southend-on-Sea and at the A.A. School. He was awarded the A.A. Holloway Scholarship in 1927 and the Fifth Year Travelling Studentship in 1929. After leaving the A.A. School he joined the staff of Stanley Hall and Easton and Robertson, being engaged on the design and execution of the Hospital for Sick Children, Gt. Ormond Street, London, and on the British Pavilions at the Brussels International Exhibition and the Johannesburg Exhibition.

Mr. Cusdin's war-time service was with the Royal Air Force on the staff of H.Q. No. 26 Group. He was twice Mentioned in Despatches and awarded the O.B.E. After the war he rejoined the firm of Easton and Robertson as a partner and in particular association with Mr. J. Murray Easton worked on the Science Buildings for Cambridge University, London University, Queen's University, Belfast, and on hospital work in Belfast and elsewhere.

In becoming President of the Architectural Association, Mr. Cusdin follows in the footsteps of the three senior members of his firm, the late Mr. Stanley Hall, Mr. J. Murray Easton and Mr. Howard Robertson. Mr. Cusdin served first on the A.A. Council as an ordinary member in 1938 and has been Hon. Editor of the A.A. Journal, and a Vice-President. He has also served on a number of R.I.B.A. Committees.

Licensing Policy

Members will find on page 256 a general statement by the R.I.B.A. and the National Federation of Building Trades' Employers concerning licensing policy. The statement envisages, as far as possible, the type of work which is likely to be favourably considered for the grant of a licence and the type of work for which a licence is likely to be refused.

Salisbury Cathedral Spire

The Dean and Chapter of Salisbury Cathedral launched an appeal last month for funds with which to carry out repairs to the spire and also to form an endowment fund for keeping the tower, spire and roof in good condition in the future. The total sum required is £100,000, of which £30,000 is needed for urgent work to the spire, leaving £70,000 for the endowment fund.

The most urgent work is the removal and replacement of the cross, capstone, and the top 25 ft. of stonework of the spire,which has been damaged by expansion due to the rusted wrought iron cramps; extensive restoration will then be undertaken on the next 25 to 35 ft. In this work of replacement and restoration non-ferrous metal will be used. The architect is Mr. W. A. Forsyth [*F*].

In launching the appeal the Dean of Salisbury Cathedral—the Very Rev. H. C. Robins—said that the cathedral was universally admitted to possess the finest spire in England; a daring, brilliant and unique work of architecture, and he appealed to all men of goodwill, everywhere, to subscribe to the fund.

Donations should be sent to Canon A. F. Smethurst, Ph.D., The Hungerford Chantry, 54 The Close, Salisbury.

British Stage Design

The vigorous activities of the Victoria and Albert Museum negative the too-prevalent popular idea of a museum as a static collection of relics. We reported two current exhibitions held at 'the V & A' in the last JOURNAL. Almost at once there has followed a fascinating one on British Stage Design. This consists almost entirely of contemporary stage settings and costume designs, and is the work of members of *The Association of Theatrical Designers and Craftsmen*, founded as recently as 1946. Stage design has become a profession, and its members are doing progressive and creative work, so that the prestige of British scenic art is growing strongly, abroad as well as at home. All architects who have an appreciation of stage design (and which of them has not?), should visit this exhibition. It is open until 23 July.

Mural Paintings

The first exhibition of the Society of Mural Painters, held at the New Burlington galleries was a courageous if slightly disappointing effort. Mural paintings, or rather the cartoons for them, rarely lend themselves to being viewed at a range of a few feet and divorced from the architectural setting of which they form part. Further, one felt that the ultra-modern manner of painting which characterized many of the exhibits, while it might appeal to the few, would be likely to bore or even offend the majority. Today the architect has to build for the majority and must perforce design his buildings with at least some regard for the average level of taste in art. He is not likely to employ a mural painter whose work may land him in trouble with his clients. Among the exhibits the work of John Armstrong, Mary Adshead, E. P. Hoffer, John Hutton, Barbara Jones and particularly of Hans Feibusch appeared likely to appeal to architects with community centres, schools and factory canteens to decorate.

Revised Code of Professional Conduct

The Council have approved a revised Code of Professional Conduct, which is now in the course of being printed. A copy of this Code will be distributed to every member and Student with the June JOURNAL on 20 June.

Competition for Design of Guildford Civic Hall

There were 102 entries received for the competition design for the Civic Hall, Guildford, and Mr. G. A. Jellicoe [*F*], the Assessor, is to make his award early in June. We are asked to announce that the award will be followed by a public exhibition of the winning designs to be staged by the Guildford Borough Council during the period 14–21 June.

The Annual Reception. Above: the President R.I.B.A. receiving guests in the Henry Florence Hall. Below, left: Mr. I. Murray Leslie, J.P. [*Hon. A*], Editor of THE BUILDER and Mr. S. H. Loweth, F.S.A. [*F*], Kent County Architect. Below, right: Mr. A. Leonard Roberts [*F*], Hon. Secretary, R.I.B.A.

Honorary Freedom of Maidstone Conferred on Mr. Alfred Bossom

Mr. Alfred C. Bossom, M.P., J.P. [*F*] has had the honorary freedom of the Borough of Maidstone conferred upon him. Mr. Bossom has represented the constituency as a Conservative since 1931.

R.I.B.A. Prizes and Studentships, 1950-51

The Pamphlet describing the R.I.B.A. Prizes and Studentships for 1950–51 has now been published. It contains full information upon the various Prizes and Studentships together with detailed programmes, where applicable, for the competitions.

It is obtainable from the Secretary, R.I.B.A., price 2s. exclusive of postage.

The Town Planning Institute Journal

The Town Planning Institute ask us to announce that the end of paper restriction now permits non-members of the T.P.I. to subscribe to the Institute's Journal. Starting with the next volume there will be ten issues per annum; the subscription is one guinea, post free. Application should be made to the Secretary, The Town Planning Institute, 18 Ashley Place, London, S.W.1.

R.I.B.A. Diary

TUESDAY, 20 JUNE 6 P.M. Council Election Results. *Discussion on the Town and Country Planning Act*, led by Professor W. G. Holford, M.A., M.T.P.I. [*F*].

Report of the Working Party on Building Operations

Summary of the Report *

The Working Party was appointed in July 1948 'to inquire into the organization and efficiency of building operations in this country, including those of the specialist and sub-contracting trades; the position of the professions in relation thereto; the arrangements for financing operations; and the types of contract in general use, and to make recommendations'

Wages and conditions were excluded from the terms of reference as also was civil engineering. The Working Party points out, however, that it is not always easy to draw a distinction between building and civil engineering and indeed some of the statistics which were quoted are for both; nevertheless it has directed its attention mainly to 'the arrangements for the building, repair and maintenance of houses, flats, schools, shops, hospitals, office blocks, commercial and industrial premises, and similar accommodation.'

The Working Party invited bodies and individuals to submit evidence and 211 persons appeared before it either as individuals or representing organizations.

No Revolutionary Changes Recommended. In spite of the fact that all sorts of suggestions are made from time to time for reorganizing the building industry, the Working Party makes no revolutionary proposals; the word 'nationalization' is not even mentioned. It accepts the industry for what it is, namely a craft-based system for providing and maintaining buildings, each on its own site, by designing and contracting units of different sizes scattered all over the country. The Working Party assumes that the present organization and contractual system must be retained but wishes to see it greatly improved and the recommendations are all aimed at such improvement. So far as architects are concerned, the importance of pre-planning building schemes in much greater detail than heretofore is strongly emphasized. In this it is recognized that the client, by making up his mind in detail beforehand has an important part to play. The architect is also urged to acquire more knowledge of and make use of new methods and materials, particularly those which will give economy. The contractor is urged to improve his organization, to make use of more mechanical equipment, particularly small equipment on the building site and to employ better costing systems. The scientists are told to make their research findings more readily available and more comprehensible to the industry. The extension of British Standard Specifications is recommended. Special forms of contract as used by government departments and some local authorities are condemned; the Working Party sees no reason why the R.I.B.A. standard form of contract, or at any rate a form based on it, should not be used universally. The Ministry of Works comes in for some adverse comment on the way in which the licensing system is operated and the Ministry of Health and local authorities are adjured to bring the bye-laws up to date and make them more flexible. It is suggested that architects and builders should have the same basic studies for the first two years of training.

The Working Party establishes its view of the nature of building operations by saying at the outset: 'Building work has in general to be done at the site, where the product is used, and in this respect the building industry differs from factory industries. There have been extensive developments in the manufacture of parts away from the building site, and this practice seems likely to increase; but it remains true that whatever the method of construction or the nature of the materials or the size of the components, the services of the building industry are performed mainly on the site. This is a fact which has always to be borne in mind in the examination of suggested improvements based on factory experience and mass-production methods.'

The Financial Value of the Industry. In 1948 building and civil engineering work accounted for no less than 58 per cent of the gross fixed investment of Great Britain and was valued at £1,181 millions. Comparable figures for 1935 were 60 per cent and £494 millions and for 1938 53 per cent and £606 millions. The building product is very varied in character and includes new construction, the adaptation and conversion of existing premises, maintenance and repair work and to a certain declining extent war damage repairs. (See Table 1.)

Builders in General. The report sets out five categories of building firms but observes that there is no rigid line of demarcation between them. These are:

'(*a*) A few large firms of building and civil engineering contractors capable of dealing with the biggest jobs and with any type of work in any part of the country and in some cases abroad;

(*b*) A greater number of medium sized firms (some of them also engaged in civil engineering) capable of most forms of building and civil engineering except the very biggest jobs, and confining their operations usually to their own localities;

(*c*) A number of builders, some of considerable size, who before the war developed housing estates to their own designs and specifications;

(*d*) A larger number of general purpose builders whose work consists mainly of alterations, additions, repairs and maintenance, but who often erect small groups of houses or single houses;

(*e*) An indefinite but very large number of jobbing builders, many employing only a few operatives and working themselves, occupied almost exclusively with repair and maintenance work.'

In addition there are a large number of firms which carry on only one branch of general building work, such as plumbers, painters, roofers, plasterers and glaziers. A special feature of the industry is the very large number of firms which regularly employ less than five operatives and the very large number consisting only of single craftsmen or of one or two partners, usually relatives, who employ no operatives.

The total force of the building industry is given at present as 1,128,020 insured males in the building and civil engineering industries, which compares with 1,361,820 in 1939, but at present there are only about 35,000 unemployed and it is considered that the labour forces actually in employment at the two dates were not markedly different. During the war the total number fell to 600,000 in 1945. The percentages at present engaged in the different crafts are given as, carpenters 15 per cent, bricklayers 11.6 per cent, masons 1 per cent, slaters and tilers 1.1 per cent, plasterers 3.5 per cent, painters 15.7 per cent, plumbers and glaziers 6.3 per cent, all other occupations, mainly labourers, 45.8 per cent. In the allied trades there has been little change in the numbers in the various groups except of electrical contractors and their operatives, which have more than doubled since 1945.

On the question of continuity of employment, the report says: 'Employment in the building industry is "casual" in the sense that engagements are terminable at short notice. It is an accepted thing that they will be so terminated on the completion of the current job, and that a new engagement will be begun with the same or some other employer after a shorter or longer interval. This is consistent with the existence of practically continuous employment with the same employer in a considerable number of cases, particularly on maintenance work or with certain specialist firms.

Table 1

Percentage Distribution of Output

	1935	1947	1948
New Housing	48	34	31
Factories and Warehouses	5	10	10
Shops, Offices, Hotels, etc.	6	1	1
Other new building works	8	9	9
Civil Engineering Works and Maintenance	7	10	11
All other Maintenance	26	36*	38*
	100	100	100

* Includes war damage repairs.

* *H.M.S.O.* 2*s.* 6*d.*

Moreover, in recent years there have been changes which have lengthened the requisite period of notice of dismissal, and have guaranteed a certain minimum period of engagement, or at least of remuneration. It remains true nevertheless that the industrial life of the great majority of building operatives must consist of a succession of new engagements, as one job finishes and another begins; they have in the past been fortunate if the intervals of unemployment were not prolonged. In the fifteen years before the last war unemployment was always present and often very serious.'

Design and Supervision. It is pointed out that the professional advisers associated with building operations receive their remuneration directly or indirectly from the building owner and that it is their duty to protect his interests; but professional standards also require that they should not fail to pay proper regard to the legitimate interests of the contractor.

The position of the architect in relation to the industry is described as:

'The architect may be commissioned for a specific work or he may be employed on a salaried basis by a Government Department, a Local Authority or an industrial undertaking. He is responsible for advising on matters affecting the site, designing the work for which he is responsible, and selecting the materials to be used and the methods of construction to be employed. He obtains the necessary approvals, invites tenders, and advises upon the selection of the contractor. He supervises the progress of the work and certifies the interim and final payments to the contractor. He must study the interests of those he serves, not only through the effectiveness of his designs, but also by ensuring economy in first expenditure and subsequent maintenance.

'The Architects Registration Act of 1931 provides that no one may practise and describe himself as an architect unless his name is on the Register of the Architects Registration Council of the United Kingdom. Under this Act and the Charter of the Royal Institute an architect as such may only serve a firm of building contractors in a salaried position, and may not be a principal or act in a managerial capacity.'

Productive Efficiency. The principal conclusion with regard to production is that during 1946 and 1947 it was about two-thirds of its pre-war level. The report notes that a similar decline occurred after the 1914-18 war. The extent of both the decline and a recent small improvement has varied considerably from site to site. The London County Council have claimed that on certain of their Value Cost Contract sites where incentives schemes are operating, they have regained their 1939 level of productivity, but this experience is still exceptional.

At the end of 1948, building costs generally appear to have been about two and a half times their 1939 level, though the extent of the increase varied for different types of building and between different parts of the country. During 1949 there was a slight improvement but it is too early to say whether this will be maintained, particularly in view of the devaluation of sterling. Labour cost in 1948 was about 2.8 times its pre-war level and materials 2.2 times their pre-war cost. Regarding the cost of form-filling the report says: 'Overheads plus profits stood at nearly three times the pre-war level (partly owing to increased clerical staff for dealing with controls and forms) and account for just under a fifth of the total increase. The seriousness of these increases in cost is not to be underestimated, but in order to keep the matter in due perspective it should be remembered that they are not out of line with those which have occurred in industry generally.'

The reasons for the fall in productive efficiency and for high cost are stated to be numerous and complicated. Most of them are the direct effect of the war, for instance, the interruption in recruitment and training, the doubling in 1945 of the labour force which gave constant employment to the less efficient, a similar effect on managerial staffs and the relaxed discipline due to the Payment by Results Incentive Scheme applied in 1941 under the Essential Work Order.

Regarding the post-war demands on the building industry the report says: 'Immediately after the war a vast programme of building work was launched without adequate pre-planning. The Government's estimate of the load of work that the industry could sustain was over-optimistic and the programme fostered by official encouragement or direction made excessive demands on the available resources of labour, management, materials and professional services. The result was that these resources were very thinly spread, and the quantity of work started was only distantly related to the supply of building materials and labour then available. Hence building schemes were unable to proceed with the regularity which is essential to efficient operation. Subsequent efforts to adjust the building programme in accordance with the supply of materials and the size of the labour force were unsuccessful; and the drastic revision of the national investment programme led to still further disequilibrium in the industry. The uncertainty for which these changes were responsible gave rise to feelings of frustration both among contractors and workers. The campaign to "finish the houses" and the capital cuts in 1948, both introduced with little or no warning, affected also the producers of building materials, who found that their assessment of the demand for their goods was liable to be upset by sudden changes of policy which they could not possibly foresee. Finally, besides the discontinuity and uncertainty caused by sudden alterations in national and regional programmes, the result of the planning arrangements when they reached the stage of actually letting the contracts for houses was that Local Authorities too often had to dole out these contracts in small packets and at short notice. This made it impossible for the building contractor to organize his business so as to provide for an even and regular flow of work.'

The scarcity of building materials since the war is said to have contributed more than any other factor to the fall in productive efficiency. This is a matter with which all architects will be familiar. But the report emphasizes that it is impossible to provide for smooth delivery of goods to all types of building contract unless there are adequate stocks locally available in merchants' yards.

The overloading of the capacity of the building industry which has been chronic since the end of the war has also eliminated the reserve of labour with which the industry formerly operated. In the past a firm, without any special planning of its labour requirements beforehand, could, to a large extent, rely on obtaining all the kinds of workers it required by drawing on the reserve of unemployed labour as and when it needed them. Since the war, in a period of full employment, the absence of this pool of labour has resulted in jobs being held up; it has also influenced the geographical mobility of labour and finally has raised the rate of labour turnover. Employers, faced with shortages of labour at critical moments, have been inclined to offer additions to current wages in order to attract workers from other sites. The worker on his side is readily able to shift from one employer to another without fear of unemployment. The less competent workers have been able to remain continually at work. The less efficient employers also have had little difficulty in getting work.

The operative's attitude to his work has undergone a change and there has been some evidence of a decline in morale reflected in the abuse of privileges. This is due to food shortages, the difficulty of getting lodgings and the nature of much of the work. This last has given little opportunity to highly skilled craftsmen and the decline of the quality of materials has had a discouraging effect on them. The report also says: 'The security which the building operatives have enjoyed since the war has certainly tended to reduce the efforts of those among them who were formerly kept up to the mark by fear of unemployment.'

So far as the responsibility of contractors is concerned the report says: 'Competition has not been absent; but there has been enough work for all. The keen buying of materials, which before the war was an important factor in keeping down costs, has been rendered impracticable by the shortages and controls; the variation clauses in contracts have sheltered the contractor from some of the main risks to which his business is normally subject in consequence of changes in prices of materials and wages. In the face of the grave drop in productivity remedial measures were not pursued with adequate energy; in particular, incentive arrangements initiated by the employers and accepted by the industry received no more than half-hearted support in England and Wales and in Scotland were almost completely abortive. Not all the major factors which determine the cost of building are within the employers' control, but we think they should beware of complacency in the face of continually rising costs.'

Regarding prospects in improvement in efficiency the Working Party says that most of the causes of inefficiency it discusses are likely to be temporary in their effect: but the maintenance of full employment as a declared object of public policy and planning controls in their post-war form are elements to which the building industry must accommodate itself. Special measures will be necessary to provide substitutes for the harsh pressures which were once exerted by heavy unemployment. The suggested remedies are incentive schemes, greater interchangeability between crafts, arrangements to curtail the period of unemployment of operatives moving from one job to another and above all a re-establishment of the spirit of responsibility for good output which is traditional in the industry.

Controls. Controls due to shortages will no doubt be removed as the country's economic position improves, but they may be expected to continue for some time. The Town and Country Planning controls on the other hand have to be regarded as permanent though their precise shape and extent may alter. On the question of controls the report says:

'Economic reasons make it necessary for the Government to set down a programme of future building work, expressed in a general total of money or otherwise and divided into a few general categories. The preparation thereafter of a practical programme, depending as it does on an expert evaluation of all building resources, is a difficult task and we suggest that the responsibility for it should be centred in a single Government Department. One point we wish to stress particularly in this connection is that in allocating total supplies of materials and labour among the various uses, those responsible for the programme should make provision for reserves, since these are necessary to meet the inevitable difficulties of distribution. . . . In the absence of reserves or stocks, local shortages are bound to appear.

'A programme of future building work, if it can be depended on, is of the greatest value both to the building industry proper and to the manufacturers of building materials. Unfortunately the building industry, more perhaps than any other, has in the past suffered on account of recurrent failure to implement announced programmes. If building is to be looked on as a "tap" which can be turned on and off for economic reasons, then efficiency can not be expected.'

After describing the changes and cuts which have been a feature of the post-war building programme, the report says: 'This experience, however inevitable on economic grounds, can not but have a disturbing effect on the general morale of the industry and we greatly hope, therefore, that in the interests of efficiency it will be possible to avoid further abrupt and violent changes in the programme.'

Pre-planning and programming require reasonable certainty about the supply of labour and materials at different places and times and the availability of all necessary licences and permissions. It is desirable that the local programme of building work should be known well in advance so that labour and materials resources may be properly organized. Controls as hitherto operated is said to have failed to satisfy these conditions.

The Working Party has obviously made a close study of the current difficulties of obtaining licences and permissions from the various authorities and on this point it says:

'Another matter of complaint concerns the delay and uncertainty which arises from the need for obtaining licences and permissions from a number of separate authorities. For instance, in the case of a proposal to build a medium sized factory it would be necessary to get authority from the Board of Trade as regards its location and to apply to the Local Authority for (*a*) bye-law permission, (*b*) general planning permission which the Local Authority will give either as local planning authority or as its agent, and (*c*) the ascertainment of the development charge from the Central Land Board to whom the Local Authority passes the form. A building licence would also be required, and the developer would have to apply for this through the appropriate sponsoring Government Department. The granting of a licence is accompanied by any authorizations necessary for controlled materials. Building can not start until all the applications have been successful. Arrangements are made to enable certain of these applications to be made concurrently, but in practice this is not always found to be possible.

'We have been told that the time taken in obtaining permission from the various authorities is excessive, and that the intending building owner is kept in a state of uncertainty and often growing exasperation. Meanwhile his architect has the choice either of incurring the expense of preparing complete plans which may lie unused in his office for an indefinite period, even if in the end they are used at all, or alternatively, if he waits for the building licence which expires in two months, of having to begin work with incomplete plans. The duplication of the technical examination of proposals by the officials employed by the various authorities is one of the reasons for the shortage of staff from which architects and surveyors suffer.

'In calling attention to these points we do not overlook the difficulties with which those responsible for organizing the controls have had to contend; moreover, we understand that the problem of introducing greater co-ordination has received some consideration. Nevertheless, we find it hard to believe that, with the benefit of the experience that has been gained, it is not possible to adjust the arrangements in such a way as to reduce materially, if not entirely to remove, their adverse effects on building efficiency; if this is not done the building industry can not operate as efficiently as it should. We urge strongly, therefore, that this is a matter which ought again to be examined immediately in a determined effort to find and apply a remedy.'

Finally as a major consideration in the improvement of efficiency of building operations, the Working Party considers it to be of vital importance that all concerned in building operations, whether employers, operatives or professional men, should be animated by the right spirit and should take the right attitude towards their responsibilities. This does not merely mean the performance of an honest day's work but it is the duty of all to co-operate fully and wholeheartedly in everything that helps to improve efficiency, cutting down all forms of waste and above all extending the advantageous use of all appliances, methods and materials which scientific and technical advances place at the disposal of the industry. There is, the report says, no general formula for improving morale except good leadership and it is a primary function of representative organizations in the industry to promote such leadership.

The Layout and Personnel of the Industry. After discussing the organization of building firms and the training of managerial staffs, foremen and operatives, the report discusses the professions. Of the architectural profession it says:

'The architect should be capable of advising his client, not only on matters of planning and design but also upon the financial implication of a project and his proposals. He must also advise upon the method of construction, the materials to be used and the extent to which advantage is to be taken of new developments in materials and building technique. He should combine technical knowledge with practical experience. We have been told that there is a tendency for architects to be over-conservative and reluctant to adopt new ideas. There are often sound reasons for a cautious approach to new ideas but the architect should make known to the building owner any advantages of scientific development.

'Elsewhere in this Report we have stressed that all the information necessary must be in the hands of contractors before tenders on a truly competitive basis can be ensured, and that the efficiency of running a contract must be impaired unless complete information is available before work is started. The primary duty of the architect to ensure that the details and drawings are available may be hampered by the incompleteness of the instructions given him by his client. From the evidence before us it would appear that this lack of decision and failure to supply fully informative drawings and particulars are increasing. The numerous variations and alterations so often introduced in the course of construction add to the cost of building. We hope therefore that both clients and architects—as business men realizing the effect upon the cost of work as well as the efficiency of the industry—will strive mutually to remedy it. We realize that many architects are under some strain in keeping pace with the demands made upon them by reason of their inability to obtain the assistants necessary, but we hope this is a phase that will pass.

'We have already noted that whereas a member of the Institution of Civil Engineers may engage in the contractual side of civil engineering work without resigning his

membership of the Institution, a member of the Royal Institute of British Architects may not, unless he serves on a salaried basis. A registered architect is similarly prevented from acting in a managerial capacity by the code of professional conduct of the Architects Registration Council. Whilst it is not for us to suggest the removal of a restriction deliberately imposed to safeguard the independent status of the architect, we appreciate the advantages of a closer contact with the industry. It would be of advantage if those who desired to enter the industry were able to take a common course of study for an initial period before deciding whether to enter as architects or to take up managerial appointments on the contracting side.'

Regarding the organization of government departments in regard to their responsibility for building the report says: 'We stress the importance which attaches to research and development, standardization, contract procedure, pre-planning and all the other ingredients of efficiency and economy. In this respect a very special position is occupied by certain Government Departments which under present conditions control more or less directly a vast amount of building work. These Departments combine the functions of the building owner, the architect and even the quantity surveyor in a way which is quite different from that of the ordinary building owner. This places on them a unique responsibility and the first point we would stress is that these Departments should shoulder this responsibility and play their part. But in the next place as Government Departments will differ in their ways of handling this problem as they do in other things there will be no clear-cut lead given and no clear field for research and its application in Government building unless direction is largely centralized in one Department, which is itself imbued with the importance of these aspects of the matter. Some steps in this direction were taken during the war when the Ministry of Works was developed out of the former Office of Works, but in our opinion the concentration of these functions in a single Department has been allowed to fall short of the point at which full advantage would be reaped. We recommend therefore that this matter should be re-examined and that without encroaching on the administrative responsibilities of the different Departments, technical advice on all matters relating to building should be provided by one technical Department.'

Contract Arrangements. After discussing and rejecting in general a scheme for qualitative registration of builders and pointing out that direct labour organization, operated by local authorities, ought to be as efficiently managed as are good commercial organizations, the report discusses various forms of contract, beginning with the R.I.B.A. Standard Form, mentions the variants of it employed by many local authorities, the Ministry of Works (CCC/Works/1), the Scottish Standard Form, etc., and goes on to say: 'A complaint made by a number of witnesses was that many Local Authorities were making minor and often needless amendments to the R.I.B.A. Standard Form of Contract. This practice, it was maintained, tended to increase prices by causing contractors to include a higher margin for risk owing to their unfamiliarity with the substituted terms in the Contract. We believe that greater conformity with the standard document would be possible, and we recommend therefore that Local Authorities in England and Wales should, wherever practicable, use the R.I.B.A. Form without variation, and that if after due consideration they think the Standard Form is not wholly satisfactory for their purpose they should indicate clearly the variations which they make, e.g., by including them in a separate list, in order that they may be easily and clearly identified by the tenderer. Similar considerations apply to the forms of Government contract. We see no reason why the present diversity should continue, and recommend adoption for Government contracts of the ordinary Standard Forms or, failing this, of a special standard form with a list of permitted variations.'

Bills of Quantities and Nominated Sub-Contractors. On these the report says:

'While we accept, as we have already said, the practice of having bills of quantities in general, there is, we think, a danger that if their use is insisted upon indiscriminately on the smaller jobs or on jobs of a repetitive nature the result may be an increase in the contract price, particularly if the pricing of the bills is done by a tenderer who is not well acquainted with this procedure. For this reason a modified system of measurement which reduces the number of separate items has been drawn up by the R.I.C.S. and the N.F.B.T.E. for housing contracts in England and Wales, i.e., the Code for the Measurement of Building Work in Small Dwelling Houses. We think that with prices at their present level the limit of £1,500 referred to is too low, if applied at all rigidly and without regard to the particular circumstances. The subject is a technical one into which we can not enter in detail, but we think the considerations mentioned should be examined by the Joint Contracts Tribunal.

'We wish also to stress the recommendation of the Simon Committee that when specialists are selected by the architect or engineer they should, wherever possible, be selected as a result of competitive tenders to a specification drawn up by them and the practice of the specialist submitting his own design and being appointed without competition should be limited. We appreciate that there are occasions when the latter course is appropriate; it has, however, been suggested to us that it is too readily adopted. If tenders are not based on the same design they represent different things at different prices and comparison between them becomes difficult because operational and maintenance costs, life of structure or plant, factors of safety, and general efficiency should all be assessed as well as the capital cost. Moreover, the considerable cost which the tenderer incurs in preparing designs for unsuccessful as well as successful tenders must be reflected in his prices. The building owner who does not employ a consultant in such cases is not necessarily avoiding a designer's fee.'

Management of Building Operations. One of the main features of the report is its stressing of the need for complete pre-planning of building operations. The builder should have complete working drawings before he prepares his programme and it is the architect's responsibility to see that these are prepared and if necessary to impress on his client the advisability of not starting work until they are ready. A schedule of work to be done indicating the date at which each stage should start and finish should be drawn up by the builder at the beginning of any contract of reasonable size. In Scotland where the general contractor is seldom employed, the architect himself should draw up the outline schedule and leave the separate trades and contractors to fill in details. In spite of present difficulties in the supply of materials such programming of work would nevertheless be advantageous. A labour abstract should also be prepared so that the contractor can give early notice to the local labour exchange of what his labour requirements will be. The progress of work on the site should be reviewed periodically so that it can be compared with the schedule. The report continues: 'We view with favour the use of site meetings between the architect, the main contractor and his foremen, and the sub-contractors, for co-ordinating work. We commend to the industry the practice of holding an initial meeting convened by the architect to launch the contract, so as to ensure that the programme of work is acceptable and well understood and that all necessary information is available to the main contractor and his sub-contractors. Periodic meetings to review progress and, maybe, to revise the time schedule are also in our opinion highly desirable. Joint meetings held at intervals on the site are also a means of exchanging information, securing co-operation, exposing faults in the site planning arrangements which might otherwise be overlooked, and securing any contributions and suggestions from operatives for improving production.'

Materials and Methods. After discussing incentive schemes, joint production committees, safety and welfare and builders' costing methods, the report deals with the supply of materials. On this it says:

'The builders' merchant has an essential part to play in the conduct of building operations, both by maintaining a stock of building materials and components from which, in normal times, the builder could draw his supplies at short notice, as and when required, and also by allowing a period of credit before payment, and thus reducing the capital that would otherwise be needed by the contractor. Post-war shortages have inevitably interfered seriously with the working of this system, and it is greatly to be desired, in the interests of general efficiency, that it should be fully restored as soon as possible, though this must depend mainly on improved supplies. It is important also that the system should

operate without undue cost to the purchasers. This aspect is dealt with in the Report* referred to, and we have not thought it within our province to investigate it further.

'It has been suggested to us that the bulk buying of building materials and components could with advantage be developed by Government Departments, certain Local Authorities, and other large organizations. There has however been no firm evidence of a desire for this on the part of those most likely to be able to fulfil the conditions necessary for bulk buying. It is our view that bulk buying requires a certainty that the materials bought will be used reasonably soon and that the expenses of storage and additional transport might well exceed any saving which could be made in the purchase price, quite apart from the difficulties of getting goods to the site at the right time. Moreover, when the materials concerned are in short supply, bulk buying tends to accentuate the shortage.

'Much has been said and published about the proper use of traditional materials and components and about the introduction into building technique of new materials and prefabricated components. We appreciate that in an industry built up largely on a tradition of craftsmanship and convention, the assimilation of new ideas by all sections of the industry must be gradual; but there appears to us to be some justification for the criticism that in certain respects there has been a slowness and even perhaps a reluctance to take advantage of new materials, new plant or new techniques. As we say in the chapter on Research it is imperative that the industry should exert itself to profit by investigation undertaken on its behalf. An example of what we mean is the frequent use in designing steel and concrete constructional work of safety factors in excess of those really necessary. This practice, besides wasting material, leads to excessive building costs. New Codes of Practice, we understand, have opened the way for improvement but this is a matter that should be kept continually under review.

'Having said this we must in fairness mention one or two problems which have arisen from the changes in materials and have been brought to our notice by witnesses. The point made most frequently was the wastage of existing craft skill and the immobilization of existing machinery as a result of the use of substitute materials. This applies particularly to joinery, where skill and machinery can not be used to full capacity because of the replacement of timber by other materials subject to entirely different processes and requiring the work of other craftsmen. Some witnesses have gone so far as to criticise the materials used in lieu of timber as being costly and cumbersome, and to suggest that productivity in the industry as a whole is reduced by the substitution of materials which have to be highly processed for an unprocessed material such as timber.'

Standardization and Codes of Practice. The Working Party advocates the greater use of British Standard Specifications and greater production of materials and components already subject to them. There seems to be some ground for the criticism that many manufacturers lag behind in the production of standard goods. Modular co-ordination is mentioned but no comment is made on it beyond a note that it is at present under examination by the B.S.I.

Bye-Laws. The Working Party says that existing bye-laws have been criticized by witnesses as unduly restrictive and not sufficiently flexible and it notes that the bye-laws of adjoining authorities sometimes cause confusion and unnecessary expense. It has considered a proposal for uniform bye-laws throughout the country but feels that there must inevitably be a certain amount of local variation. The Working Party says it understands that the importance of uniformity is kept in mind by the controlling government department. It does not, however, feel entirely satisfied that revisions are made sufficiently frequently.

Research. After rejecting a proposal for a building industry development council and recommending that research be retained in the hands of the present bodies, mostly government research organizations, the Working Party suggests that there should be a more careful selection of subjects for research and that special consideration should be given to effective ways of publicizing results and encouraging their use. It notes that the Ministry of Works has decided in agreement with the industry and professional organizations to develop technical information research on a regional basis and it points out that publicity has to be aimed at the building owner, his professional advisers, the contractors, and the operatives who will ultimately carry out the work.

Building Finance. Apart from the capital invested by partners and shareholders in building firms, there are two more sources of finance in advance of payments by the building owner, namely, normal banking credit facilities and building societies' and builders' merchants' credit. Some witnesses complained of delays in the making of payments, particularly of retention money. The report points out that such delays by building owners must be reflected in the prices charged by contractors.

The practice in certain circumstances of requiring performance bonds from contractors is regarded by the Working Party as often unnecessary. This is particularly the case with local authorities. The requirement is no doubt connected with the rule usually applying to local authority contracts for housing that the lowest tender should be accepted and the fact that banks are restricting the issue of these bonds strengthens the argument in favour of selective tendering. The report says, 'if tenders were obtained only from firms who could be relied on to carry out the job, performance bonds would be unnecessary . . . the requirement of bonds by local authorities should be limited to the cases in which it is really necessary and should not be excessive in amount.'

In reply to representations by subcontractors that there is often delay in payment of sums due to them by the principal contractor, the report points out that this is properly covered by the R.I.B.A. Form of Contract and the Scottish Code. More complicated is the problem of payment to sub-contractors where there is insolvency of the main contractor. The Working Party recommends that the bodies concerned should see whether some appropriate form of sub-contract could not be found which would give further protection to the nominated sub-contractor in the event of insolvency of the main contractor.

Personnel of the Committee.

Chairman : Sir Thomas W. Phillips, G.B.E., K.C.B.

Professor G. C. Allen, M.Com., Ph.D., Economist, Professor of Political Economy in the University of London.

Mr. J. Armstrong, Member, Executive Committee, National Federation of Building Trades Operatives ; Secretary, Operatives' Side of the Civil Engineering Conciliation Board.

Sir Hugh Beaver, Managing Director of Messrs. Arthur Guinness Sons and Co., Ltd. ; formerly Controller-General, Ministry of Works.

Sir George Burt, Past President, Federation of Civil Engineering Contractors ; Past Chairman, Building Research Board.

Mr. R. Coppock, C.B.E., General Secretary, National Federation of Building Trades Operatives.

Mr. H. Drake, B.A., Representative of Federation of Associations of Specialists and Sub-Contractors ; Past President of Electrical Contractors' Association.

*Sir Luke Fawcett, O.B.E., President, National Federation of Building Trades Operatives.

Mr. H. B. Kerr, M.C., J.P., Member of Council, National Federation of Building Trades Employers ; Past President, London Master Builders' Association.

Councillor J. McInnes, M.B.E., J.P., Member, Scottish Building Costs Committee.

Mr. S. John Pears, Chartered Accountant; Partner in Messrs. Cooper Brothers and Co.; formerly Principal Controller of Costs, Ministry of Supply.

Mr. W. T. Porteous, Past President, Scottish National Building Trades Federation (Employers).

Mr. B. Sandercock, O.B.E., Vice-President, National Federation of Building Trades Operatives.

Assessors

Sir Lancelot Keay, K.B.E., Past President, Royal Institute of British Architects.

Mr. David M. Watson, B.Sc., Member of Council, Institution of Civil Engineers.

Mr. E. H. Palmer, Fellow of the Royal Institution of Chartered Surveyors. (Assessor for England and Wales.)

Councillor H. A. Brechin, Fellow of the Royal Institution of Chartered Surveyors. (Assessor for Scotland.)

Secretary : Mr. W. T. Lewis, M.O.W.

* Sir Luke Fawcett was appointed to the Working Party in January 1949, following the resignation of Sir John Stephenson, C.B.E., J.P., on his appointment as Chairman of the Eastern Gas Board.

* *The Distribution of Building Materials and Components: Report of the Committee of Enquiry*. H.M.S.O., 2s. 6d.

Licensing Policy

Joint Statement by the R.I.B.A. and The National Federation of Building Trades Employers

1. Informal representations have recently been made to the Ministry of Works by the R.I.B.A. and the N.F.B.T.E. pointing out that neither building owners, architects, nor building trades employers can gauge the effect on the issue of building licences of the cuts imposed on the building industry following the devaluation of the pound sterling; that as a result, much time and effort is wasted in preparing plans, etc., in respect of work for which licences are subsequently refused; and that it would therefore be helpful if the Ministry issued a statement showing, in detail, the policy followed by them in dealing with applications for building licences. The view of the Ministry is understood to be, however, that they can not give more detail than is contained in the statements already made in Parliament and in the Economic Survey. Whilst appreciating this difficulty, both the Institute and the Federation propose to raise the matter further with the Ministry. They feel, however, that in the meantime the following restatement of the position might be of some little help to members of both organizations.

2. When devaluation was decided upon it was generally agreed that a reduction was to be made in the capital investment programme and as the Building and Civil Engineering industry was responsible for about one-half of this programme, the two organizations felt that the decision to reduce the expenditure on building and civil engineering could not reasonably be opposed. This decision, as announced by the Prime Minister in the House of Commons on 24 October 1949, was broadly:

(*a*) to reduce the new housing programme by £35 million, the reduction to fall mainly on private enterprise housing, and

(*b*) to make a further saving of about £35 million in what he termed the miscellaneous category.

3. The position was amplified by the Chancellor, also in the House of Commons, on 26 October 1949. He confirmed both the amount of the cut in new housing and the manner in which it would be made. After referring to reductions on building under direct Government control such as schools, he said, in dealing with the field of miscellaneous investment where a cut of £35 million was to be made, that as far as building and civil engineering was concerned much of the cuts would fall on maintenance and repairs; that to keep this work within bounds building controls would be tightened and the exemption limits of licensing would be lowered; and that although the reduction must be made effective as quickly as possible, no action would be taken which would dislocate works already in progress or seriously upset the balance of the Nation's resources.

4. The Building Industry was not consulted about the new housing cuts and the N.F.B.T.E. promptly made representations against their obvious political discrimination. Although the new housing cuts have now been restored, an announcement to the effect that the ratio of nine Local Authority houses to one Private Enterprise has reverted to four Local Authority houses to one Private Enterprise is still awaited, and it is hoped that the ratio will be applied nationally instead of area by area.

5. The Industry was, however, consulted regarding the cuts in the miscellaneous field and the R.I.B.A. and the N.F.B.T.E. advised the Minister of Works that the £100 limit for housing should remain and that if the £1,000 limit for non-housing work had to be reduced, the new level should be considerably above the general limit of £100.

The Government eventually decided:

(*a*) to maintain the £100 limit;

(*b*) to reduce the £1,000 limit to £500 to apply to industrial buildings and farm buildings other than dwelling houses;

(*c*) to secure the remainder of the reduction by restricting the issue of licences by 20 per cent in the licensing of work both on new works and maintenance. Included under these headings are office buildings, shops, churches and recreational buildings of all kinds.

It was suggested that the working of these arrangements should be reviewed after a period of, say, three months.

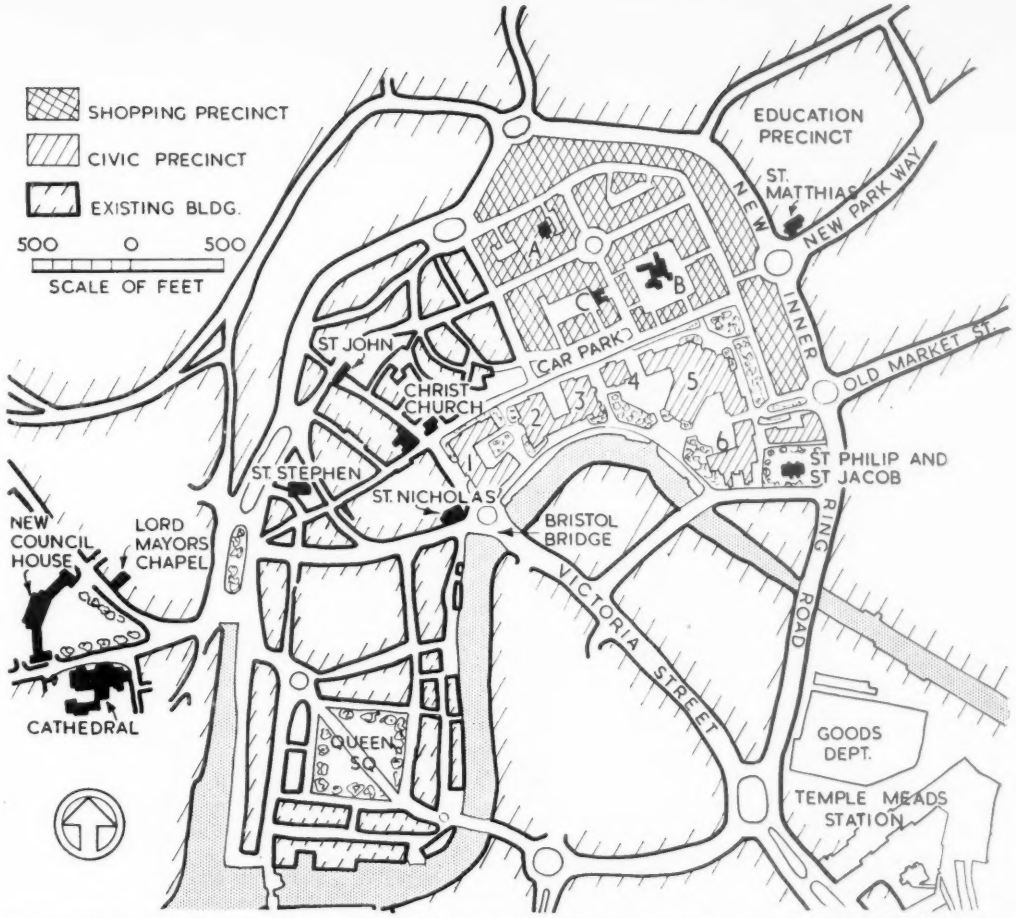
6. The position was further dealt with in paragraphs 115-120 inclusive (and in the Appendix on pages 40-51) of the Economic Survey 1950. It was pointed out that building and constructional work for the other social services—water, sewerage, health services, miscellaneous local government services, schools, universities, Home Departments' services and broadcasting—would be limited approximately to the rate achieved at the end of 1949. There would also be some economies in constructional work in the transport and communications field and in the manufacturing industry. The limitation of capital investment also required a substantial reduction in the sector which comprised a wide range of miscellaneous investment in building, including such items as the repair and maintenance of shops, offices and commercial premises (much of which is below the licensing exemption limits) as well as a smaller amount of new work in this field. In addition, restrictions would be imposed on repairs and maintenance to houses.

7. To sum up, it seems reasonable to infer that the restrictions on industrial building will continue and that the Sponsoring Departments, of which the principal ones are the Board of Trade and the Ministry of Supply, will continue to look very carefully at proposals put before them, and very largely restrict their approval to schemes likely to give a high export or import saving return, particularly in terms of dollars. On the other hand, encouragement will be given to projects designed not merely to increase capacity, but to lower cost of production.

As regards the 'miscellaneous' field, this contains such a varied collection of types of work, that it is impossible to forecast with any precision what will be allowed and what will not. As will be seen, however, the Economic Survey specially refers to shops, offices and commercial premises, and the cuts that have to be made would, it seems, hardly leave room for new office buildings unless the circumstances were quite exceptional. In the same way, new shops and public houses seem likely to be severely restricted except on grounds of special need—e.g., in new housing areas. New work on places of recreation are likely to be allowed only if serious danger to the public exists or otherwise in the most exceptional circumstances. This is in line with the statement made by the then Minister of Works in the House of Commons on November 25 that no village halls would be allowed. As regards housing conversions and repairs and maintenance to houses, local authorities have already been instructed to restrict severely the value of licences issued in 1950 under this heading. For the majority of Local Authorities this decision can only throw an added strain on their already extended quotas and it is evident that some document such as a dangerous structure notice will be required if an application for a building licence is to be successful.

8. The two organizations feel that the position as set out above is not entirely satisfactory. They hope that ways and means will be found by which the Ministry can issue a statement which will give more detailed guidance to owners, architects and building trade employers, without causing either confusion or misunderstanding.

28 April 1950



Sketch plan taken from the preliminary layout for the re-building of the centre of Bristol. Key: 1 Office building, 2 Art College, 3 Museum, 4 Library of Commerce, 5 Conference Hall, 6 Health Centre, A John Wesley's Chapel, B Quakers Friars, C Merchant Tailors' Almshouses (now Weights and Measures office)

Post-War Municipal Development in Bristol

City Architect: J. Nelson Meredith [*F*]

THE POST-WAR position of Bristol was much the same as that of many other large cities that suffered in the war. Large areas of the older central parts were destroyed by fire and high explosive in several air raids; pre-war projects for ring roads and traffic improvements, partly executed when war broke out, had to be revised in an entirely new town plan; there was also a severe shortage of housing and schools.

The Central Area. After much discussion, the plan for Bristol was approved. The chief point of contention was the proposal to build an entirely new shopping precinct round Broadmead on land mostly occupied by some obsolete and badly blitzed factories. The site for this is a level area to the north of the hill once occupied by Bristol Castle and by the usual conglomeration of congested shopping premises which form the nucleus of most cities of ancient foundation (see above). The hill itself is to be replanned and occupied by a group of much-needed civic buildings. These will be both conveniently placed for the life of the city and look well from the customary approach over Bristol Bridge. These two planning units, the shopping precinct and public buildings precinct, together with the existing mercantile and business centre of the city, suggested bus station, warehousing and markets precincts, will be enclosed by an inner ring road.

This new plan for the city centre is a sensible solution to a complex of problems. The city is to be given a renewed heart and one that should work well. The choice of a flat site for a shopping centre is obviously wise; the hill had long been too small and congested for shopping and forms a good site for the public buildings; the inner ring road should by-pass much of the heavy traffic that is now forced through the city centre. The usual protracted battles had to be fought to get the plan accepted, but they will undoubtedly prove to have been worth while. The shopping precinct is first priority, and notifications are in hand for the building of several shops and department stores. Work has actually started on the first shop which has been designed by the city architect. The general design of the shopping precinct will follow a treatment suggested by the city architect. A perspective drawing of this treatment is reproduced on the following page.

The University. A feature of present-day Bristol is the continuing expansion of the University, which has already taken over the old city museum while other buildings

Elevation of the University layout scheme. Architects: Sir George Oatley, R.W.A. [*F*], and R. H. Brentnall, M.B.E. [*A*]; Consulting Architect: Sir Percy Thomas, O.B.E. [*F*]. From a drawing by R. F. Buckley [*L*]

are to follow, including the existing city art gallery. The town plan provides for a large university precinct, planned by Sir George Oatley, with Sir Percy Thomas as consultant, incorporating the existing university buildings and crowning the high hill immediately to the north of the city centre.

The Education Precinct. A central education precinct for the city, separate from the university, has been planned to the north-west of the central area, near the shopping centre (see plan on p. 257). This is an island site of 12 acres, and will contain a college of technology, a college of art, a college of commerce and a youth headquarters, including a theatre, all controlled from an administrative block.

The Colston Hall. Bristol's famous public hall, traditionally the venue of political meetings, boxing contests and, in particular of Bristol's fine choral concerts, was accidentally destroyed by fire. The solid masonry walls still stand, and within them the City Architect is providing a new hall, designed primarily for music. The section shows a raking floor, single gallery and flat ceiling in accordance with the now-accepted concert-hall form. The plan is rectangular. B.R.S. are acting as acoustic consultants.

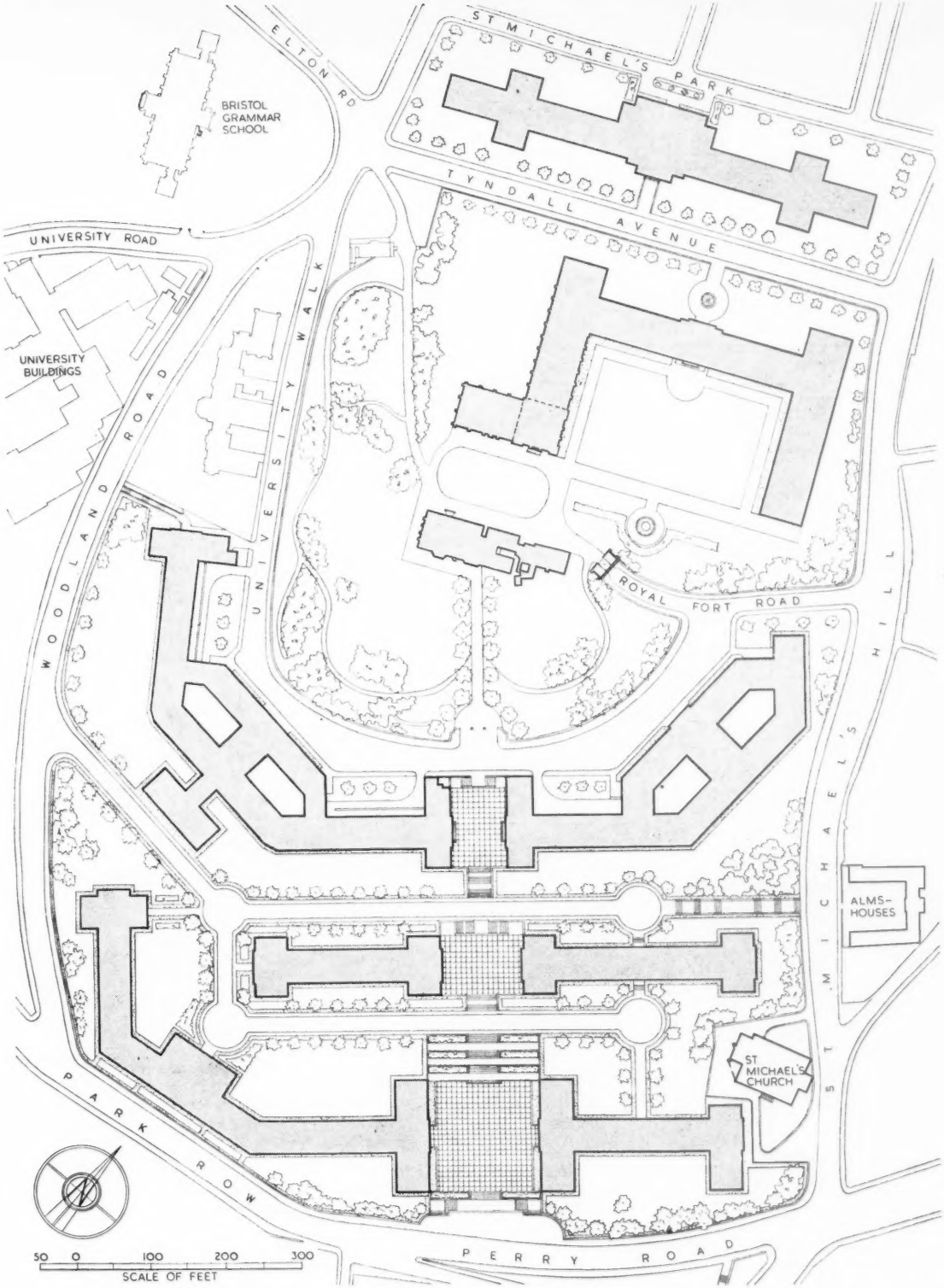
Housing in General. Post-war housing in Bristol began with the erection of temporary prefabricated bungalows, of which 382 were occupied in 1946. A total of 3,000 temporary houses had been erected by March 1949, completing the city's temporary housing programme. A programme of permanent houses was started at the same time, and September 1947 saw the

Suggested treatment for the centre of the Shopping Precinct. J. Nelson Meredith [*F*], City Architect. F. R. Steele, F.S.I., A.M.T.P.I. [*F*], Chief Assistant. From a drawing by H. Joseph Woods, Dip.Arch. (L'pool) [*A*]

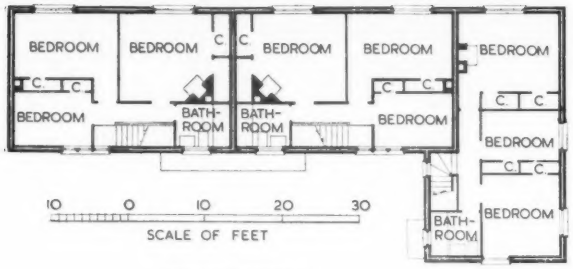
1,000th house finished. By February 1950, 2,215 permanent traditional houses and flats had been completed, 3,514 non-traditional houses and flats, and 148 permanent aluminium bungalows. All these together, temporary and permanent, make a total of 8,777 new dwellings. At the same date more than 2,000 dwellings were under contract or in various stages of construction, the foundation stone of the 10,000th post-war house being laid by the Minister of Health on 21 September 1946.

These houses have been provided partly under the Small Builder's Scheme (Ministry of Health Circular 92/46) in various parts of the city, but mainly in three large neighbourhood unit schemes at Southmead (1,027 houses), Lockleaze (894 houses), and at Lawrence Weston (2,050 dwellings). This last can be described as a neighbourhood unit in the fullest sense, the plan providing for schools, main and subsidiary shopping centres, open spaces, health centres and other ancillary buildings. The total area of the Lawrence Weston scheme is 350 acres.

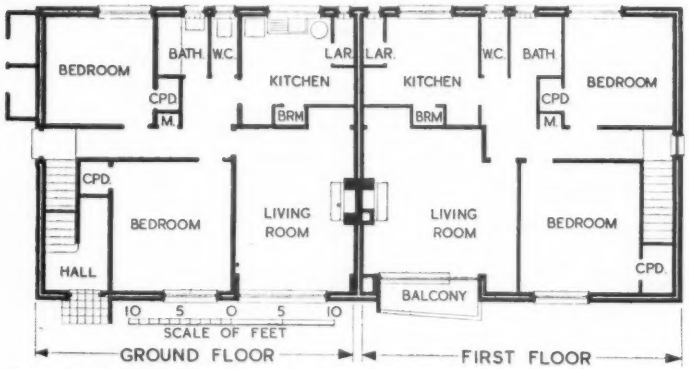
Two other neighbourhood unit schemes are in preparation. House erection has started on a site of 412 acres at Henbury-Brentry, and this will be followed by the



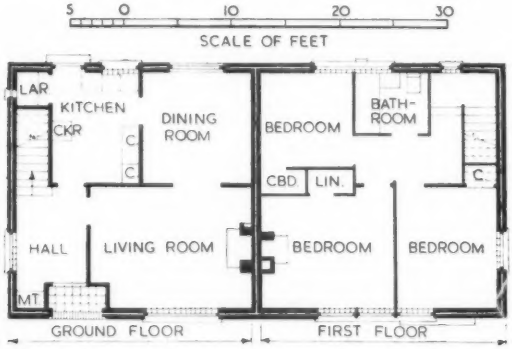
Plan for the layout of Bristol University buildings. The elevation of the group as seen from the centre of the city, to the south of the plan, is on the opposite page. Architects: Sir George Oatley, R.W.A. [*F*], and R. H. Brentnall, M.B.E. [*A*]; Consulting Architect: Sir Percy Thomas, O.B.E. [*F*]



A block of three north aspect traditional brick houses

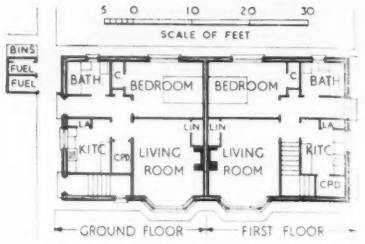


Two-bedroom flats in blocks of four, traditional construction



Three-bedroom, south aspect, traditional semi-detached houses

Plans of some of the more unusual housing designs. These now cover a very wide range of types in traditional construction. Several non-traditional types are also used



Semi-detached one-bedroom flats

540 acres' site of the Dundry Slopes (see plan, page 262). Negotiations are proceeding with further neighbourhood units on the outskirts of the city. The completion of 2,000 to 2,500 dwellings per annum is envisaged.

As regards housing in central areas a long-term project of 650 flats in blocks up to nine storeys is in the design stage; another scheme of 60 flats in three- and four-storey blocks is in course of construction in the Clifton Vale-Hotwells area; and a scheme will shortly be under construction for multi-storey flats in the Great Anne Street area.

House Design. Construction and planning of the houses are typical of present-day standards and ideas. The non-traditional houses and flats so far erected in considerable numbers include Easiform, Unity, Waites, Woolaway, B.I.S.F., Airey and Cornish Unit. Traditional houses are of the usual cavity brick wall and tiled roof construction.

In the traditional houses a strong effort has been made to get away from the monotony of large areas of semi-detached housing, though this is inherent in the non-traditional types. Some of the more unusual house and flat plans are shown on these pages. Study of the plan of the Dundry Slopes scheme shows how interest and diversity is obtained by groupings of different types. This scheme typifies the present practice of the City Architect's Department, and some account of it will help to explain the plan reproduced on p. 262.

The Dundry Slopes neighbourhood unit. The site is an awkward one, being a north slope with a maximum difference in level of 170 ft. From the south boundary the land rises sharply for another 300 feet, in some cases at a gradient exceeding 1 in 4. Springs in the higher ground form the sources of several streams traversing the site. The present access to the site is by two narrow lanes.

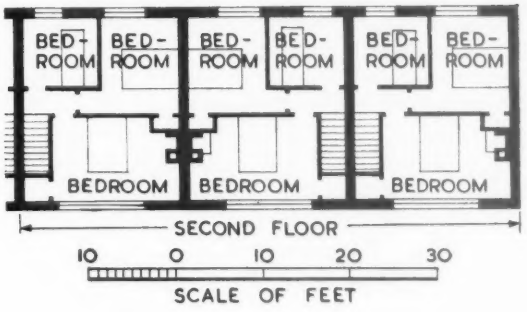
The outer ring main road will pass the site on the south, across the slopes of the hill. There will be no access from this road to the site. A proposed inner ring road will serve the site by means of secondary roads on the north-east and west sides. The estate roads conform with the latest Ministry of Health regulations regarding widths, except for the two main bus access routes which will be wider.

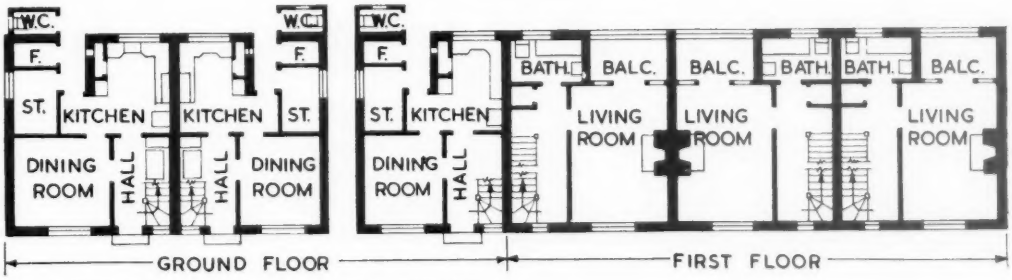
There are no services near the site at present. For water supply to the higher parts of the site two new reservoirs and pumping stations must be provided. A

A group of Easiform houses at Southmead

Traditional houses at Southmead

Flat-roofed Easiform houses at Lockleaze





Plans of three-storey houses now under construction

further difficulty is that height zoning restrictions in connection with Bristol airport virtually sterilize the eastern portion of the site for normal housing. The playing-fields for the schools and public, together with allotments, have therefore been placed here.

It will be clearly realized that the City Architect's Department have been faced at the outset with a complex of unfavourable conditions, though these are not dissimilar from those of many sites available for housing in the hilly neighbourhood of the city.

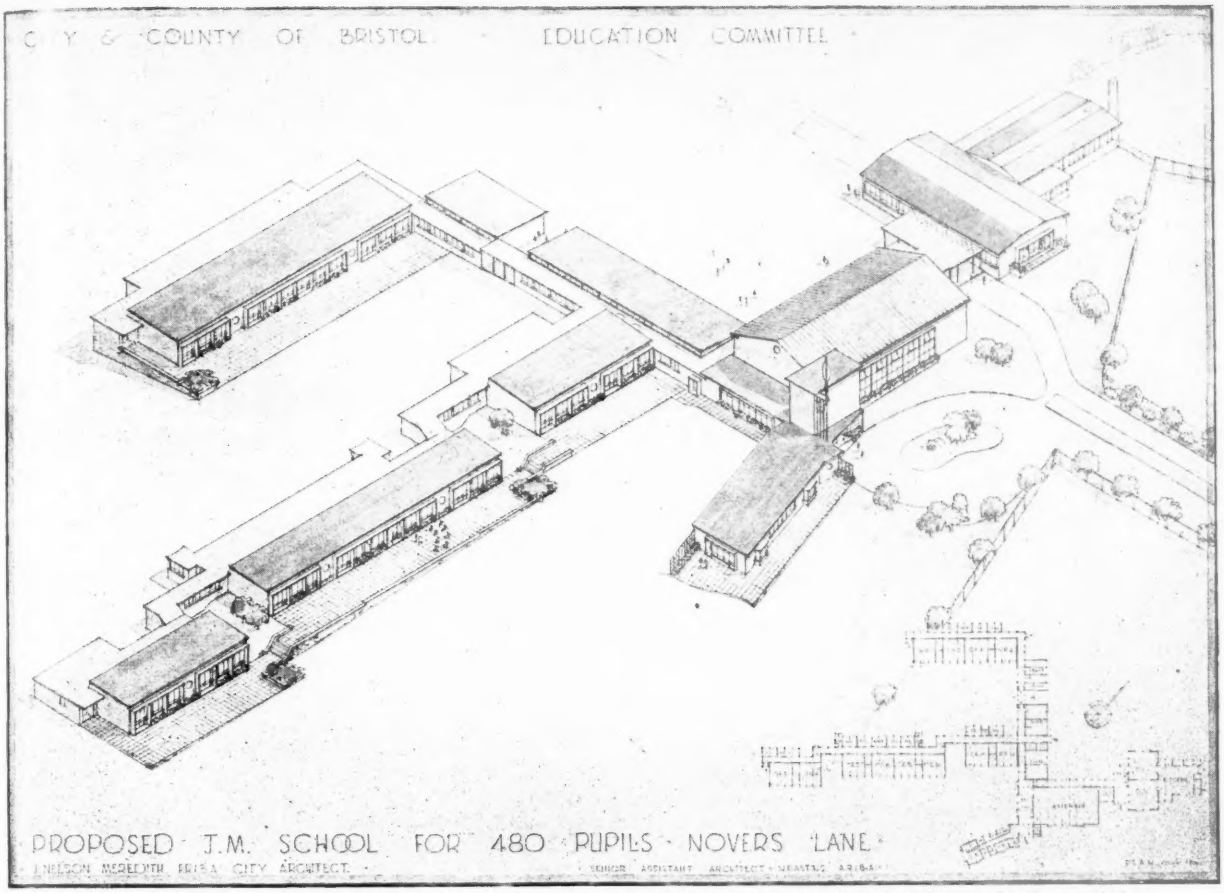
The development is arranged about the two main bus-route roads which traverse the site. Also the major streams—too costly to culvert—have been preserved partly to take storm water and partly to act as park walks. It is proposed to maintain the continuity of these walks in underbridges where the main roads cross them.

The public buildings are arranged in a main centre and three subsidiary centres. The main centre is to include a community centre, health centre, library, swimming bath, cinema and about twenty shops. The subsidiary centres will have about six shops each. Three church sites are suggested, and two existing farms will be converted for use by youth clubs. Six sites for public houses are suggested, two of which are adjacent to the main centre. The schools to be provided are: three junior mixed and infant for 480-320 each; one senior school group with youth centre on the same site; six double nursery units. These are grouped on four school sites. The junior schools have been sited to avoid unnecessary road crossing.

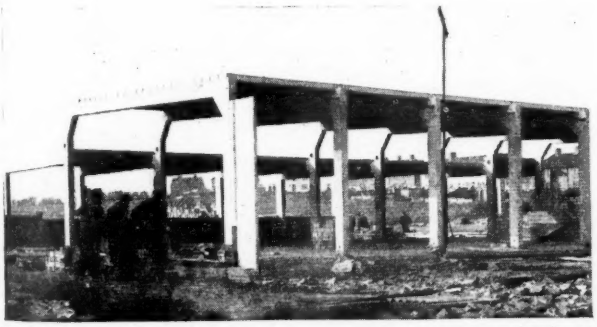
The housing provision is envisaged in two, three and four storeys, terraces being employed where practicable. Two hostels for aged persons will be provided. In all some 3,100 dwellings are envisaged. One of the three existing farms will be retained as a farm. Land for private developers of low-density housing is allocated on the south-west corner of the site.

The gross area is 680 acres, of which 540 acres is to be developed as a housing estate. Of this 58 acres can not be used for houses because of height zoning. The central area occupies 16½ acres, and the other three 10 acres. The schools occupy 90¾ acres. Open spaces are: organized games, 45 acres; allotments, 16 acres; parks and walks, 47¾ acres; total of open space, 108¾ acres. The nett area left for housing, including roads, is 314 acres. The gross

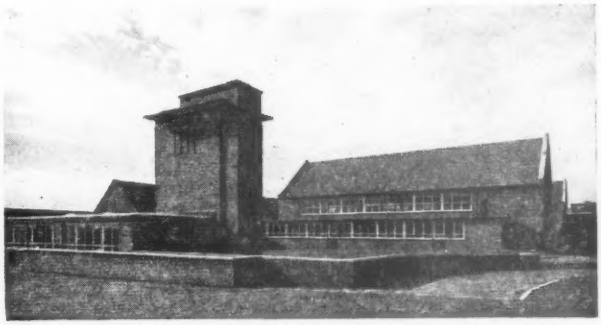
Site plan of the Dundry Slopes neighbourhood unit. Architect: J. Nelson Meredith [*F*], City Architect



Novers Lane J.M. School has precast concrete classroom framing and traditional construction with light steel framing for the remainder



Precast concrete framing for classrooms used on two schools at Novers Lane

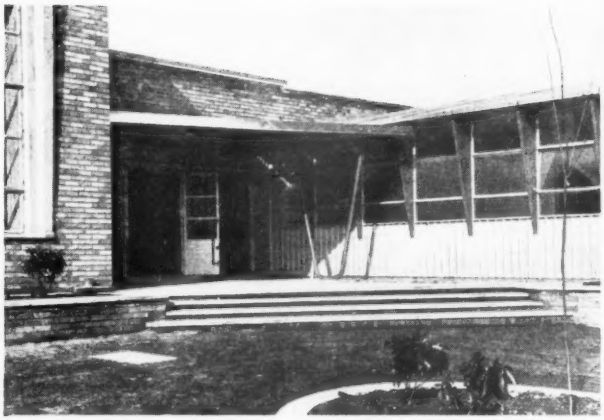


Embleton Road primary school, planned on an 8 ft. 3 in. grid

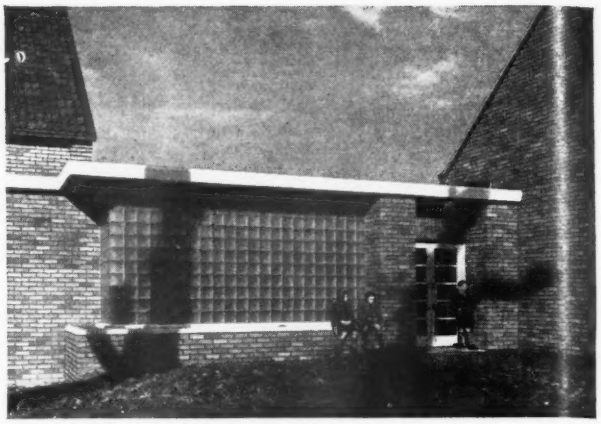
density is 5.8 per acre at 3.8 persons per dwelling or 22 persons per acre. The nett density is approximately 10 per acre.

School building. A variety of constructional methods has been used in the post-war school building programme so far. The first school for 320 juniors and infants was erected in M.o.W. standard 24-ft. span hutting with a steel-framed assembly hall. The second, embodying the requirements of the 1944 Act, was planned on an 8 ft. 3 in. grid and built entirely in the Thermagard system of construction, which consists of light steel framework and trusses with brickwork cladding and tile roofing; ceilings and partitions are of wood-wool slabs. This school was for 320 juniors and 240 infants, and built at Southmead. A similar school for 200 infants was begun at Ashton Vale (see p. 264) in March 1948. Both schools are now occupied.

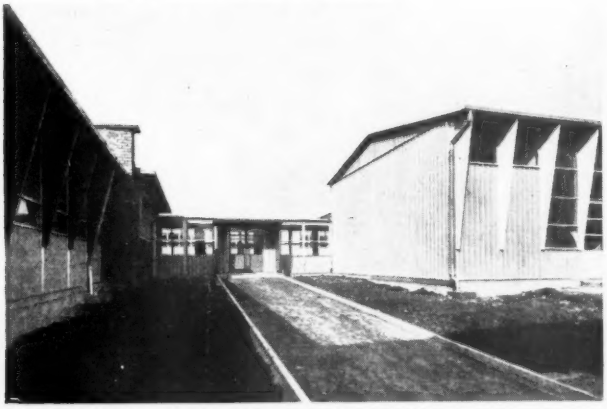
The Bristol Aeroplane Company (Housing) Ltd. were meanwhile developing their aluminium school units, and these were used for the classrooms, cloaks, medical units, sanitary blocks and classrooms in a junior school for 480 pupils at Lockleaze; the assembly hall, dining-hall and kitchen were in orthodox construction on a light steel frame (see p. 264). A second school for 320 infants on similar lines but embodying traditional brickwork was begun at Lockleaze in April 1949, and a third at Petherton Road for 480 juniors in October 1949.



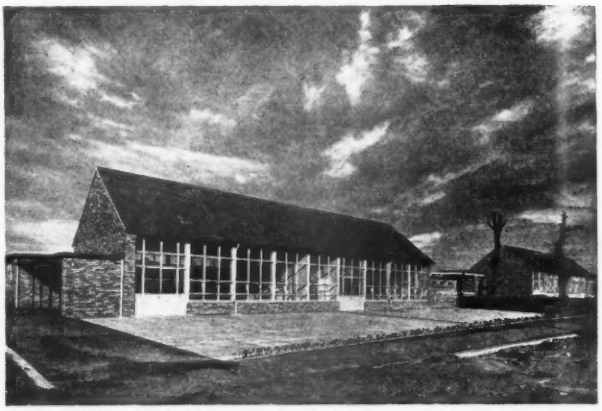
Lockleaze junior school. Detail of entrance



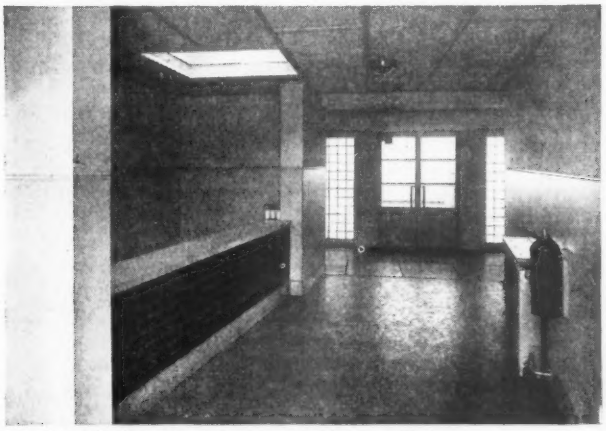
Ashton Vale primary school. Detail of entrance



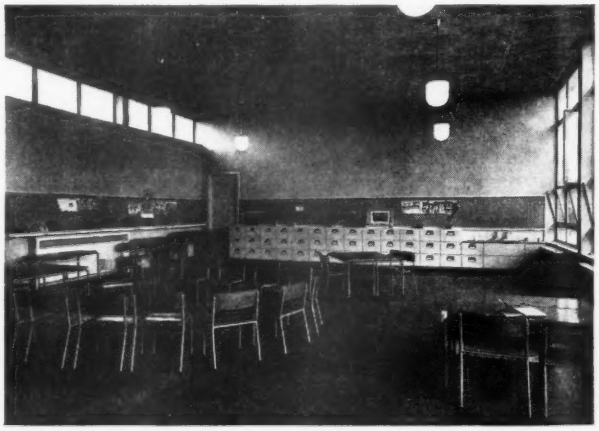
Lockleaze junior school. Classrooms in aluminium construction



Ashton Vale school. Classroom block in Thermagard construction



Lockleaze junior school. Entrance hall and milk bar



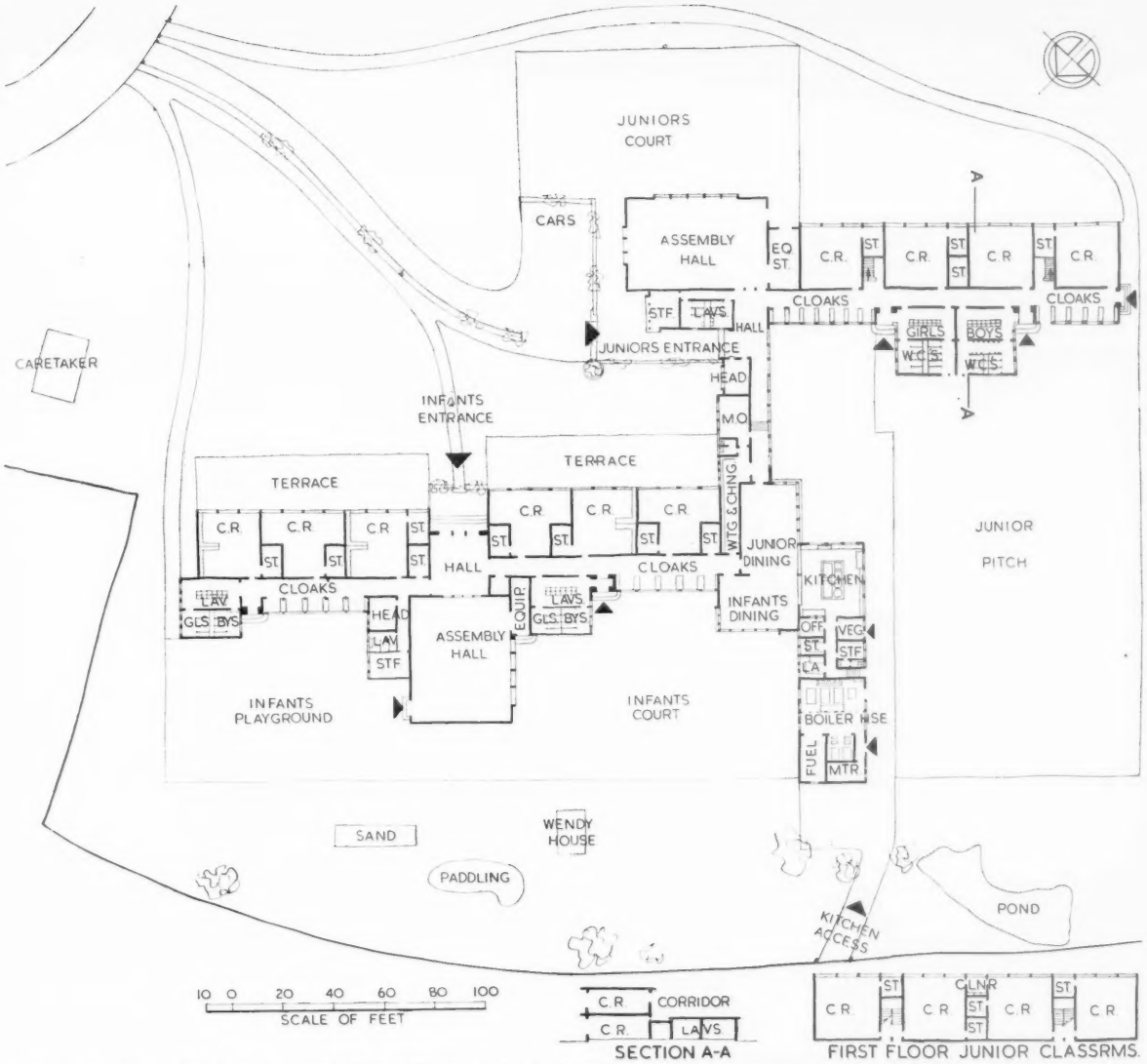
Ashton Vale school. Classroom interior

Concurrently with the use of aluminium units, a form of precast concrete construction was being developed, consisting of r.c. frames at 8 ft. 3 in. centres with precast cills, heads and baffles, and covered with precast slabs. This was used for classroom wings in two schools at Novers Lane for 480 juniors and 320 infants, the remainder of the buildings being in traditional construction with light steel frames.

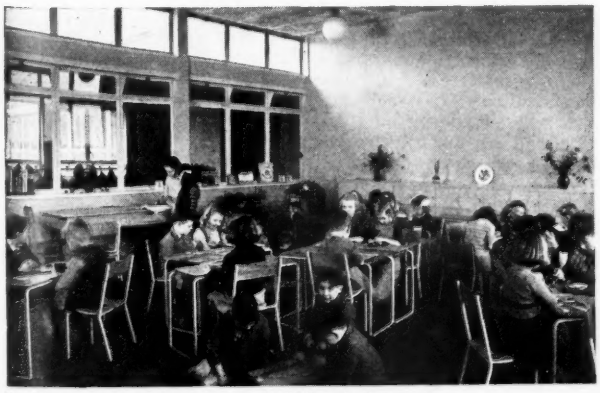
A more purely traditional school was begun for 240 at Henleaze in October 1949. The walls are of load-bearing brickwork, and the roofs generally of in-situ concrete slabs. The assembly hall is covered with a form of aluminium decking.

One secondary school, at Southmead, with 450 places, has so far been started. The construction is conventional steel frame with reinforced concrete roof and floors and brickwork cladding. Work began in September 1948.

The 1950 programme consists of four primary schools with a total of 2,200 places and a reserve of two with 520 places. One of these schools, at Avonmouth, has load-bearing brick walls with prestressed concrete roof slabs. At another precast concrete portal frames are being used for single-storey classroom sections. At a third school, on a site liable to mining subsidence, a light steel frame and brickwork construction has vertical cleavage planes.



Henbury primary, infants' and junior school for 560. Constructed principally with precast concrete portal frames and light steelwork for two-storey portion, halls, etc.



Embleton road primary school. Infants' classroom

Embleton road primary school. Infants' assembly hall

The 112th Annual General Meeting

2 May 1950

The President in the Chair

The President: I have to present the Report of the Council and Committees for the official year 1949-50, and to move its adoption by this Annual General Meeting.

The Chairmen or other representatives of all the Committees whose reports are appended to the Council's report have been asked to attend this meeting so as to be in a position to answer any questions that may arise in connection with these reports.

The Hon. Secretary seconded the motion.

The President: The meeting is now open for discussion, and the Report is before you.

Mr. Thomas Mitchell [*A*]: I am disappointed in failing to see in this very full Annual Report any reference to the planning of the time which various people give to the Committees. We have very full reports of what the Committees have done during the past year, but there is nothing about what the Committees are to do next year. Many people of experience give valuable time to the problems of the Institute and of the architectural profession as a whole. We are beset these days with far more problems than we have time to investigate fully, and it seems to me that it would only be reasonable that we should say at the beginning of every year what are the problems that we are to tackle during the year, problems to which it is worth while giving time.

The President: With regard to planning for the future, it will be realized that we have a number of Standing Committees and other Committees which are more or less permanent. The design of those Committees has been thought out over many years, and is altered from year to year to suit the various needs and requirements of the Institute. We have to depend on what comes up to us, what appears on the horizon or what is forced down our throats and with which we have to deal as and when the circumstances arise. I think that the reason why there is no attempt at forecasting the future is the difficulty of discovering beforehand what the future is going to be.

The Hon. Secretary, Mr. A. L. Roberts [*F*]: I should like to draw attention to the new feature in the R.I.B.A. JOURNAL which deals with Institute affairs, and which has only just started. This will give you information of the kind you are seeking, in that it gives you the position in which matters are left, and which will naturally come up in the following session to be dealt with, or be dealt with in sequence as the necessities arise.

Mr. Thomas Mitchell [*A*]: I was not seeking information, and I realize that the future can not be completely foreseen, as the President has rightly said. I was putting the very point the President himself made, namely, that there is a tendency to have 'forced down one's throat' (to use his words) the day-to-day contingencies, and one knows only too well from ordinary everyday experience that the broader vision of what one ought to be doing may be lost in the process.

The President: It is a very wise suggestion and a very wise thought, that we should always keep our minds on the broad prospect, and not let ourselves get confused with the details of the present day.

Mr. C. G. L. Shaukland [*A*]: I raise what is perhaps an even more fundamental question. I had hoped to read in this Annual Report that the Council had been making some representations to the Government on the whole general question of the future of architects and architecture, and calling for an increase in the building programme, which is itself, of course, the only guarantee of a future at all. This is a bread-and-butter question, but in the Annual Report, so far as I can see, there is no reference to the Institute having taken any action on this fundamental matter.

It is well known that the social building programme is shamefully inadequate as it is, with the present need for houses, schools, health centres and so on. Furthermore, work on which some of the younger architects are engaged, such as in connection with the Festival of Britain, is coming to an end in the near future, and commissions will not be given for projects which have no reasonable chance of being realized.

The Institute has expended £1,127 19*s.* 11*d.* on the questionnaire on the future of private practice. The point which I would put is that unless the social building programme is increased there will not be enough work for architects, either in private or in public practice, and it is time the Institute concerned itself with this matter. We have the right to demand work, and the duty to insist to the authorities that building and architecture are not a luxury but are essential for our economic survival. Will the Institute take this question further, or take it somewhere?

The President: That is a matter which I can deal with better than anybody else. There is, it is true, no reference in this, our own report, to the proceedings of what is called the National Consultative Council. That is a ministerial body which gives us, with the building industry and the engineering industry, a direct approach to the Minister of Works, and, though we are not allowed to mention it in our Annual Report, that Consultative Council has been doing a very great deal of work, at the top level, with the Minister and the Ministry of Works, on the whole question of the economic programme, the broad lines of the amount of money to be allowed to the building industry to spend, and the attitude of the Minister of Works towards the Chancellor of the Exchequer, which is really the most fundamental attitude of all.

The whole question is bound up with the economy of the nation, and we have urged, as the whole building industry is urging, the importance of building to national recovery, and that building is not a fit subject for an economic cut. If you have seen the Working Party report which was published yesterday, you will have seen that very great emphasis is laid on that point in that report, and you will find expression there of what is being done by the industry to impress on the Government the needs of the industry as a whole.

Mr. L. Grahame-Thomson [*F*]: I should like to add that I am a member of the Committee which is going into the question of architects and private practice. We have had a very arduous time, and I think that the officers of the Institute have had a still more arduous time in working on this. I am not able to anticipate the findings of that Committee, but you may be assured that the matter has been very carefully gone into, and you should await the arrival of the report.

Mr. Frank H. Heaven [*A*]: I have one or two comments and one or two questions, principally with regard to finance. I am very pleased to note that, with regard to the membership income and the cost of administration of this Institute, it is standing almost on the same level as last year. Last year it worked out at 64.4 per cent, and it is a similar percentage for this year. By 'this year,' of course, I refer to 1949.

I am also pleased to note, with regard to the examination income and the cost of administration of this Institute, that that too stands on a par. Last year it came to about 29.3 per cent, and this year it is working out at about 29.7 per cent. The cost of administration generally is also keeping to almost the same level. I find that in 1948 it came to 65.8 per cent, and in 1949 to 65.9 per cent, which is quite a good constant figure.

When I look a little more closely into some of the main items, however, I am not quite so happy. We are told on page 4 of the Report that the membership of the Institute has increased, and I find these figures: Fellows: an increase of 45, and a percentage increase of 2.2. Associates: an increase of 837, or a percentage increase of 14.3. Licentiates: a decrease of 17, or a percentage decrease of 0.6. Students: an increase of 436, or a percentage increase of 14.6.

That, I think, should be reflected somewhere in the income of the Institute, and it is in some instances, but not in all. I should like some explanation of that; there is probably a reasonable and a legitimate one, but it is not apparent from the figures before us. With regard to the Fellows, I find from the figures in the Report that in 1948 the income was £14,036, and in 1949 it was £14,062, an increase of £26, yet there was an increase in the membership of 45. For Associates, the figure for 1948 was £24,740, and for 1949 £28,350, or an increase of £3,610, making a percentage increase of 14.1, which corresponds very well with the increased percentage of membership of 14.3. For Licentiates, the figure for 1948 was £12,385, and for 1949 £12,201, a decrease of £184, or a percentage decrease of 1.48. For Students, the figure for 1948 was £5,703, and for 1949 £6,311, an increase of £608, or a percentage increase of 10.6, as against a percentage membership increase of 14.6. I have made no allowance for Life Membership subscriptions, because they are fairly constant in both years.

Another point which will affect the Institute in the coming years relates to the examination fees, which, in my opinion, reflect the progress or decline of the Institute. Taking the examination fees for the Final and Special, in 1948 they amounted to £6,427, and in 1949 to £7,061. For the Fellowship the figures are £125 in 1948 and £117 in 1949. Both together they come to £6,552 for 1948 and £7,178 for 1949, an increase of £626, or a percentage increase of 9.5.

With regard to the Intermediate examination, the fees show an increase of £759, or a percentage increase of 8.1. When we come to the Probationers there is a decrease of £1,040, or a decrease percentage of 11.4.

I take it that these examination fees are an indication of the influx into the Institute through the examination system. We have an increase of 8.1 per cent in the Intermediate and 9.5 per cent in the Final, representing the people who are going to come into the Associate class in the next two or three years, but in the Probationers we have a decline of 11.4 per cent, and this is going to affect our membership in five or six years' time.

The Hon. Treasurer, Mr. John L. Denman [*F*]: The last speaker has called attention to a number of decimal points, but there is such a thing as the law of averages, and some of the differences to which he has referred are accounted for by the fact that the fees in question happen to come into the end of one period or the beginning of another. You can not just make a cut with a knife and say, 'These fees represent the income from that year.'

I think you have to take a broad view of the whole position of the finances of the Institute, and I should like to remind you of certain facts. In 1938 there was an overdraft of £158,633. At that time a mortgage was entered into with the Prudential Assurance Company for £95,000. That was redeemed in December 1948, by the payment at that time of a sum of £71,000 odd. In the meantime, the remainder of the overdraft had been paid off. This year, as you will see from these accounts, a sum of about £13,700 has been added to the Completion of Premises Fund, which now stands at a total of about £24,400. The net result of all that is this, that in twelve years we have been able to pay off and to put aside a sum which totals £183,000.

I also want to remind you that we have a heavy liability for the future, because in 1960 we have to undertake the rebuilding under our covenants of 68 Portland Place, next door. We are now putting aside a sum of money to contribute towards that, and we hope that by the time it is necessary we may be able to pay off that cost without a great deal of borrowing. In the meantime, we have already obtained approval by the L.C.C. to the erection of two storeys on this building, as well as the rebuilding of No. 68, so that we have the position well in hand.

I am not claiming any credit for this position, which I consider is a very remarkable one. It is due to those who went before, and very largely to Mr. Sylvester Sullivan, my predecessor, who laid the foundations for this remarkable position in which we stand financially. Taking a broad view of the whole financial position of the Institute, we are in a very sound position.

With regard to the future, I do not think that any of us can predict what is likely to happen. We can only do our best to foresee what may come, and to plan as far as we can for the future, and we are doing that to the best of our ability.

Mr. P. E. A. Johnson-Marshall [*A*]: I should like to comment on two headings in the Report, the Board of Architectural Education and the Annual Conference. With regard to the Board of Architectural Education, I feel that a great deal of very important work is done in the Board, and that a good deal more of it could be published for the benefit of members. Everybody appreciates that the Board has to deal with some very delicate matters, but I suggest that more could be published.

There is, to judge by the published reports, a certain lack of vision in the work of the Board. The system of education which we have today may not be very good for the needs of tomorrow. We have had in the past very valuable people like Mr. Lethaby, who pointed the way years ago to a greater connection between ourselves, the training of architects, and the training of the building industry as a whole. The representatives of the building industry now quite rightly demand university training for those in building management, and I suggest that the Board might consider in the future a rather broader attitude.

With regard to the Annual Conference, I should like to make a few points which are in no way a criticism of the excellent arrangements made by the Allied Society. I feel, however, that the Conference could be an extremely important national event. I would criticize the Conferences in the past, and particularly the last one, because the R.I.B.A. is a very important national body, a learned and scientific society, and I think we are all aware of other learned and scientific societies which tackle matters of national moment and which are widely reported and gain very greatly in prestige thereby.

Last year everybody agreed that the subject was very important indeed—nothing could be more important than housing—but there were only two set papers, and complaints were made from the floor that there was not sufficient opportunity given to discuss them or even to ask questions and make comments. I urge a reorganization of the Annual Conference in the following years.

Mr. K. M. B. Cross [*F*]: The officers of the Board of Architectural Education always have in mind forward planning. I believe that Mr. Johnson-Marshall is himself a member of the Board, and we shall be very pleased to consider most carefully any suggestions which he cares to make.

Mr. E. E. Hollamby [*A*]: In the Report we have figures for the Intermediate examination and for the Final and Special Final, and anybody who looks at the percentages of those who pass will be sorry to see that they are so low. I am sure that that can only indicate that the standard of training available for those who have to take the external examinations is much lower than that of those who have the advantages of the recognized schools. I think that this is an extremely important matter for the Institute and for architects in general, because the standard of our architecture will be created not only by those who are fully qualified but by those who work for them and who are not fully qualified.

If it is assumed that the external examination requirements are of the same standing as those of the recognized schools, it reinforces my point that the standard of training is nowhere near that which would be required to pass those examinations. I should like to ask whether the Council would consider establishing a number of scholarships at the recognized schools to

supplement those provided by the existing bodies, and also consider taking active steps to encourage the non-recognized schools to bring themselves up to the standard required for recognition, and thereby increase the actual number of places at recognized schools.

Mr. K. M. B. Cross [*F*]: The situation is that the standard of training in both recognized and unrecognized schools is high, and has not gone down at all. What I think is happening is that, as a result of the war, candidates for the R.I.B.A. examinations have been rather more in a hurry to get through the examinations, for various economic reasons, than used to be the case in the past.

Mr. Everard Haynes (Secretary to the Board of Architectural Education): It is perhaps appropriate that I should speak about scholarships, because I am also secretary of the statutory Board of Architectural Education. It is a provision of the Architects Registration Act that 50 per cent of the total fees for registration each year must be allotted to maintenance scholarships. This shows that there is very considerable provision of scholarships to enable students of promise to attend full-time courses at recognized schools. The R.I.B.A. also has certain maintenance scholarships, some restricted to sons or daughters of architects and artists. There is also very considerable provision made by local education authorities throughout the country, and it is our view that if a boy has promise he should be able to get full-time training.

Mr. Thomas E. Scott [*F*], with reference to the supplementary question on the new regulations in regard to Testimonies of Study, I think I should explain what the Board had in mind when the new Testimonies were introduced. They felt that it was important that they should offer every possible help to those who were preparing for the Intermediate and Final examinations. It was felt that Testimonies of Study should not consist merely of a few set-pieces, but that their preparation should as far as possible represent a carefully considered and progressive course of instruction. It was with that objective in mind that the Board asked committees of experienced teachers and examiners to draft the new Testimonies of Study to which reference has been made.

It is true that these drawings will take rather more time to prepare, but they are planned with that objective. It is intended that instead of a student being able hurriedly to prepare certain studies, he should proceed in a more careful and leisurely way in the preparation of drawings so graded as to bring him along gradually to the stage when he can successfully enter for the Intermediate and then for the Final examination.

Mr. Thomas Mitcheil [*A*]: With regard to the item of £1,127 for the questionnaire about the future of private architectural practice, was this sum authorized before the expenditure was incurred? Secondly, what is the figure of £500 shown against 'Codes of Practice Committee'? Thirdly, while we shall probably find that we have had good value from the President's visit to the U.S.A. when the report is published, is there any reason why this expenditure should be borne by the Institute? Since it was concerned with the Anglo-U.S. Productivity Council, should not it be Government expenditure? Fourthly, could we be told what is the 'Wanmer Annuity Fund', which comes to £2,082?

Next, while we appreciate the very sound position which Mr. Denman has outlined, there is nothing in the accounts representing a fund for the depreciation of furniture and fittings. It would seem to me wise that a definite sum should be set aside for this purpose.

The Secretary: On the point about the Anglo-American Productivity Team, it is true that the Anglo-American Productivity Council paid the major part of the expenses, but the various sections of the industry have to pay part of the cost of their delegates. With regard to the Codes of Practice, the £500 represents the salary of the liaison officer who deals with those committees. The Wanmer Annuity Fund was based on a definite resolution of the Council. The cost of the questionnaire on the future of private architectural practice included the cost of printing the questionnaire and the fee paid to the statisticians who took the replies when received and tabulated them, producing the figures which have been under study by Sir Percy Thomas's Committee.

Mr. J. S. Broome [*A*]: On the section of the Report dealing with the Board of Architectural Education it will be seen that there is a vast discrepancy between the number of those sitting for examinations and the number who are successful. It seems that there is a definite similarity between the discrepancy between the successful and unsuccessful candidates for examinations and recommendations Nos. 1 and 2 of the Hankey Committee of the Ministry of Labour. I think it is fair to assume that the high percentage of people who are successful in recognized schools reflects to some extent the value of the training which is received there, and that it is also fair to infer that there must be something slightly wrong with the training received elsewhere, and I am not entirely satisfied that this is due solely to haste on the part of students in unrecognized schools. A review of the figures which have been published in the JOURNAL for some few years back shows that this discrepancy existed even at times when there was no undue pressure on students in unrecognized schools to complete their studies.

I suggest that recommendation No. 1 in the Hankey Report, if it represents in any way the memorandum submitted by the Institute and also by the Board of Architectural Education, should be taken very seriously to heart, because the recommendation says, in effect, that there should be no increase in the present rate of entry into the profession by means of full-time training, and this implies that we are content as an Institute to tolerate a situation in which about one-third of the people who aspire to the profession are to be condemned to second-rate or unsatisfactory education.

Mr. K. M. B. Cross [*F*]: The Board of Architectural Education does all it possibly can in providing outline courses and lists of books, quite apart from the organized courses in the non-recognized schools.

Mr. Leonard C. Howitt [*F*]: It seems to me that there is a difference in the quality of the entrants in the two classes. Those who attend the schools go through a thorough screening before they are admitted, and if they fail at the end of the first or second year they go out, and by the time they get right through they are people who are likely to pass. The other type of entrant gets no guidance or indication that he is likely to fail until he comes up against the Intermediate examination, and it is only to be expected that in the external examination there should be a much larger percentage of failures than in the case of the school-trained men.

Mr. A. B. Knapp-Fisher [*F*]: One other factor is the great difficulty which the unrecognized schools have in getting the right type of master. An appeal might be made to the younger members of the profession to give a little time to teaching in provincial unrecognized schools.

Mr. Thomas E. Scott [*F*]: One of the speakers has touched on a fundamental difficulty experienced by so many of the schools, recognized and unrecognized, and that is the scale of salaries which is permitted by the Ministry of Education and the Burnham Committee, which is not sufficient always to attract the people that we should like to see in architectural education. Architectural education, however, is not a matter which can be dealt with and changed radically merely by a resolution at a meeting such as this. It is a matter which can only be developed and improved over a fairly long period of years.

I can speak both for the Northern Polytechnic, which is a recognized school which trains a large number of young men employed in architects' offices, and as a member of the Board for 25 years, and I can say that I have seen a substantial development in the provision of architectural education for the student who has to work at the school in the evening. Quite recently the number of facilities in other schools providing part-time training has been increased. The facilities offered have, I am sure, contributed a great deal towards the improvement of part-time architectural education. If we are content to wait a year or two, I think that we shall see a substantial improvement in the quality of architectural education available to the part-time student.

It is true that we do not always get the right material in architects' offices. It is my experience that quite a number of unsuitable youngsters have entered offices and have found it a tremendously uphill

battle to cope with the duties which they are required to perform in their office and at the same time prepare for the Intermediate, and in due course for the Final examination, and it is not to be expected that they are always going to reach the required standard in the shortest possible time, which often seems to be the objective.

To quote a particular instance with which I am familiar, we require evening students to devote at least five years to preparing for the Intermediate examination. I am sure that a large proportion of the candidates for the Intermediate examination are attempting to take that examination in a much shorter space of time, and I do not see how they can hope to reach a standard which will satisfy the examiners in three or four years.

One remedy would be to lower the standard of examination, so that a much larger proportion would get through, but I do not think that that would satisfy the Institute or the profession as a whole. We must maintain a reasonable minimum standard, and if it results in a large proportion of students coming up two or more times, in the end it is for their good. I hope, however, that the improved conditions of education which the Institute is encouraging will in due course produce rather better examination results, but not at the expense of the standard.

Mr. E. E. Hollamby [*A*]: My second request was whether the Institute would take some really positive steps, not just waiting for the non-recognized schools to come up to the standard, but assisting them to do so, so that they could be made recognized schools. We do not want to lower the standard.

Mr. Richard Henniker [*F*]: I think there is a misconception here. I think—and I speak as an examiner—that the problem of candidates who do not come up to the standard is much greater among those candidates who do not attend any school at all. Many of them had their jobs held open for them during the war, and they came back and found themselves completely out of touch with architecture, and living conditions more difficult. They asked for more money, which could not be given to them because everybody was in the same boat. Some employers took refuge in saying, 'If you can pass the Intermediate examination or the Final examination you will automatically come on to a different scale.' That is quite a fair explanation of a large number of those who have not attended any school at all and who fail.

Mr. K. M. B. Cross [*F*]: The recognized schools are strictly limited in number, and they are zoned. The Board does all it can to assist the unrecognized schools, as I have said before, by providing courses of study and lists of books.

Mr. C. G. L. Shankland [*A*]: Is not it time that the Board recognized more schools?

Mr. K. M. B. Cross: It will be appreciated that, apart from the question of standards, recognition depends on the geographical distribution of the schools and on the demand in the area in which a particular school is situated.

Mr. George Whitby [*A*]:I should like to call your attention to the balance sheet. It is, I think, a most unsatisfactory one. We will go through the assets first. The leasehold of 66/68 Portland Place is valued at £102,000 odd. This is on the assets side, but last year we were told that this lease was in fact a liability. We were told by the accountant that the £102,000 represented the cost of the lease to the Institute, and that it was common practice to put such an asset as that down at cost. I do not think that it should be included as an asset, even if that is the common practice; it is not worth £102,000.

That, however, is not the only asset which has gone down. If you look down the list of assets, there is £2,756 against the investment of the Henry Jarvis bequest, but that is worth only £2,600, and in fact it has gone down £300 since last year. In the Life Membership Fund, the first investment has gone down £550 in value since last year; the Treasury stock has gone down £150, and the 3 per cent Savings Bonds have gone down £600. The Staff Pension Fund has gone down another £100, and in fact our investments have gone down in value by £1,700.

We are much worse off than before, but, as you will see on the left-hand side of the balance sheet, our surplus of assets over liabilities is put at £105,000. If you take the true value of this lease and knock down the value of the investments, you will find a very much lower figure. This surplus of assets over liabilities is the real worth of the Institute. It may be good accountancy practice to put down these figures at cost, but it does not show us the true position.

The cash at bank under 'Investments allocated to Completion of Premises Fund' is surprisingly high, £13,000. It was probably transferred at the end of the year; we do not want £13,000 doing nothing.

Turning to the income and expenditure account I am glad to see that some of the ghosts that I found there last year have been well and truly buried. There is nothing for the National Plan this year, which is a good thing. Some of the ghosts that I criticized are not even mentioned. The Architectural Science Board had a sum last year allocated to it. Has that been buried? The Public Relations Committee had £2,000 last year, but even last year's expenditure is not mentioned. The Negotiating Officer and appointments section were £1,400. I do not think that they have been buried—yet. I expect that they are hiding under a nice blanket sum, under salaries or petty expenses, but I should like to know where they have gone.

Then there is the canteen. Two years ago I brought this matter up and was told that we had expended £450 to set the canteen on its feet, and that in succeeding years we should not have to expend much more. Last year we found £69, and this year we have to find £1,275. It is an extraordinarily large sum to finance a staff and members' canteen. You will say that it is really only £274 19s. 2d, but I am adding £1,000 for rent and rates on the large room, and heating and lighting, which are not mentioned here at all. I feel certain that this Institute should not have to subsidize a canteen which gets its premises, heating and lighting free.

Mr. Mitchell raised a point which I should like to follow up. He suggested that somewhere in the Report there should be given some lines of policy which the Institute intended to follow during the succeeding year.

One of the things that worries me most is the fact that the young firm or the young architect in private practice today has very little hope of getting any of the big jobs. The big jobs are going to be handed out by public authorities and corporations, hospital boards, coal boards and so on, and there is very little opportunity for the small private man ever to get to know the presidents or chairmen of these great bodies. It was comparatively easy in the old days for the young architect to get to know the chairman of his local hospital, and perhaps get a small extension to do to enable him to prove his worth, but to get to know the chairman of a hospital board or of any of these big corporations is a very different matter.

There is, I believe, a solution to which the Institute has already paid some attention, and it lies in the competition system. The competition system, however, is not popular, particularly amongst promoters. I have spoken recently with two potential promoters of competitions, and they did not like the competition system because of the extra cost, and some of them complain about delays. It does mean perhaps an extra 1 per cent on the building costs to run a competition, and in these days of stringent finance the promoters fight shy of it.

I suggest that the Council and the various Committees should consider whether the cost of competitions can not be borne by the architects themselves. The best way is by letting the winner pay the assessor and the other costs—after he has won. Looking into a number of recent competitions and making some sort of a guess at the administrative costs, including exhibition costs, I believe that the cost of running a competition is about 1 per cent of the total building cost. It would mean that the client would pay 6 per cent, and the winner would get a minimum of 5 per cent, and probably in many cases a lot more.

It may be argued that this is undermining the scale of charges, but I am sure that it will greatly increase the number of competitions. If promoters knew that they were losing nothing by going out to competition, they would be much more willing to do it. There would be more competitions, and more chance of getting a prize and a job out of them. I believe that the winners would be prepared to forego the 1 per cent of their fee. The sacrifice which the winners would make would be well worth making if it increased the number of competitions and gave the younger architects in private practice, and of course in salaried employment, a greater chance to come forward on their own.

I should like the Council and the Committees to give serious consideration to that in the future. It is obvious that a number of points will need to be thoroughly thrashed out, and I am sure that there will be a large amount of opposition; but I believe that if it increases the competition system it will help architecture immensely.

One further point; if time is saved in a number of instances, and there is no extra cost to the promoters, perhaps limited competitions might be put forward on a much greater scale; perhaps people who got seconds and thirds and mentions two or three times could be nominated for limited competitions. We must do something to make certain that the brighter young men can have a hope of getting the big jobs.

The President: The Secretary has had a great deal of experience in talking to promoters of competitions, and some of his experience may be helpful.

The Secretary: I do not often disagree with Mr. Whitby, but I disagree with him fundamentally on this, because, while he says that he has spoken to two would-be promoters of competitions, in the course of the year I speak to dozens; and in my experience it is not the cost which frightens them off, but the fear that they will get an inexperienced architect as the winner. It is R.I.B.A. policy to foster competitions, and we do our utmost to do so; but I do not think that the solution of letting the successful competitor pay the assessor's fee—after he has won—is the answer, because in any case the promoters, if they are worried about the cost, will still have to face the expense of the second and third premiums, the cost of printing, the cost of exhibiting the drawings, and so on. My chief difficulty, however, is to comfort them and say 'You can be quite certain that anybody good enough to win the competition will be good enough to deal with contractors and sub-contractors and carry out the job satisfactorily.' That is what usually frightens them. There is also the feeling that they have no say whatever in the choice of the winning design.

Mr. George Whitby [*A*]: I did not mean that only the assessor's fee would be paid, but that all the competition expenses would come within that 1 per cent. There may be something in my suggestion that an increased number of limited competitions may be possible. I know that the selection of the competitors might be an invidious task, but I feel certain that the Institute has within its walls a sufficient number of men of wisdom to be able to select competitors who would give promoters value for money.

Mr. John L. Denman (Hon. Treasurer): Mr. Whitby mentioned the fortuitous position that at a certain date a sum of £13,000 or so happened to be surplus and in cash. These accounts have to be made up on a certain date in the year, and I can not believe that Mr. Whitby would imagine that we should allow that amount to remain uninvested. It was invested within a matter of days. I think that the canteen has rendered a remarkable service to this Institute, to the members and to the staff.

As to his other references to the accounts, I certainly should not like to be as dogmatic as he is with regard to the technicalities of accountancy, and I shall be happy to ask Mr. Nicholson, our accountant, to deal with the points raised on the principles of accountancy.

Mr. Nicholson: If Mr. Whitby thinks that at any time I have said that a leasehold is a liability, he must be under a misapprehension. I remember that the figure of £102,000 at which it stands in the balance sheet was not the cost of it; a very considerable amount was written off some years ago. He says that the accounts do not represent anything like the real state of affairs, but he rather missed the point that there has been added to the Completion of Premises Fund this year a sum of £14,000, which in the main is cash.

I admit that the value of the investments at 31 December last was less than the cost of those investments. I can assure him, however, that it is not usual to write these assets up and down every year. If the value of the investments continues to go down, then I think that there is a very good case for writing something off them and decreasing the surplus.

Mr. Thomas Mitchell: I do not think that I was told what the Wanmer Annuity Fund was.

The Secretary: Mr. Wanmer, who came to us from the Society of Architects many years ago, was employed in various categories, first in the advertising department and then, during the war, he came into the office staff. He was over the age for entry into the normal pension scheme, and he died before reaching pension age, though the Council had agreed to give him a small pension when he reached the age of 65. In the circumstances the Council decided to set aside a sum of money to provide a small pension for his widow.

Mr. D. H. McMorran [*F*]: I take it that Mr. Whitby's point about competitions will be referred in due course to the Competitions Committee?

The President: Yes.

Mr. Denman: The capital sum shown against the Wanmer Annuity Fund will on the death of Mrs. Wanmer go to augment the Completion of Premises Fund.

Mr. J. L. S. Mansfield [*F*]: As a visitor here, it would be inappropriate for me to say anything in detail about the Annual Report, but as a Fellow of the Institute attending for the first time in that capacity, and for the second time in my life, I should like to say something. The President of the Royal Australian Institute and the President of the New South Wales Chapter have both asked me to convey to the R.I.B.A. greetings from Australia.

Today has been an interesting day for me. At the President's invitation I witnessed the Allied Societies Conference. I listened with interest to the deliberations of your Council, and I have now topped the day off by listening to quite a typical meeting of an Institute of architects. Nobody will resent my saying that the same types emerge at these meetings in all parts of the Empire, and it is good that that is so.

I should like to say, with regard to the feelings and affections that we in Australia have for the mother Institute, that we are very closely linked with you. It is quite surprising when you think that on the other side of the world a separate country, only united by common allegiance to the one sovereign, should have such intimate and close links with the parent Institute. Those links are seen mainly by the large numbers of Australian architects who are corporate members of this Institute. They are members because of the prestige which this Institute has all over the world, and also for sentimental reasons. In my own case there was a great sentimental reason, because I happen to be the grandson of the first Australian F.R.I.B.A., and it was an interesting event for me, some years after becoming a Fellow, to be admitted to the Fellowship today.

We read your JOURNAL carefully, and we are amazed at the amount of work that is put in by your Council, your officers, and by your members generally, in committees and conferences and boards, and in working parties, whatever they may be. I must find out about that, because the only working party I know is an Army working party, which is apparently quite a different thing. We are amazed at the work that is done here, from which we gain considerable benefit. I hope during my stay here to learn how you find the time. You appear to have a class of architects who have been successful in the past and who can now afford to give a tremendous amount of time to the welfare of their own profession, but I suspect that there are many others who give their time at great personal sacrifice and inconvenience, because of the spirit of service which is patent in every manifestation of your activities. On that I congratulate you.

I should like to thank you, Sir, for the welcome that has been extended to me as temporarily representing the President of the R.A.I.A., who has asked me to take back to him as much information as I can about the work of the Institute and the profession here. I thank you, Sir, for your personal welcome to the various activities of the Institute, and I look forward very eagerly to the time that I shall spend here. My only comment on the Report is that it is a most impressive document, and, as is always the case, there is so much that is done that is left unsaid.

The President: Mr. Mansfield, I thank you on behalf of the Institute for the greetings you have brought, and I hope that when you write to your President you will convey our greetings from this Annual General Meeting.

If the discussion is now closed, I will ask you to vote on the resolution before you, which is as follows :

> 'That the Report of the Council and Committees for the official year 1949-50 be approved and adopted.'

The resolution was carried unanimously.

Mr. John L. Denman (Hon. Treasurer): I am sure you will all agree that we can not allow this meeting to pass, the last Annual General Meeting at which Mr. Waterhouse will preside as President, without some expression of our deep gratitude to him and to Mrs. Waterhouse for all the strenuous and able guidance and inspiration which they have given us. (Applause.) I am reminded of the lines

'Full many a gem of purest ray serene
The dark unfathomed caves of ocean bear.'

Mr. Waterhouse is a gem who has risen to the surface of our professional ocean. He has served this Institute over a large number of years, as a member and as Chairman of Committees, as our Honorary Secretary, and culminating with his Presidency over the last two years, when he has so admirably guided us in all our deliberations.

Mr. Waterhouse's family have indeed set up an Institute tradition. His grandfather was President for three years, from 1888 to 1891. His enormous practice was the marvel of my youth. We have among our treasures his portrait by Orchardson, which I think is probably one of the best that we happen to possess. Twenty-eight years later, Mr. Waterhouse's father, the late Mr. Paul Waterhouse, served as our President for two years, from 1921 to 1923. He was a man remarkable for his fine literary erudition. Then, 25 years later, Mr. Michael Waterhouse became our leader. The work, therefore, that this family has done on behalf of the Institute covers a period of nearly three-quarters of a century.

I ask you one and all to show your deep appreciation and gratitude to our President and to Mrs. Waterhouse for the splendid services which they have given us in this family tradition of devotion to our Institute.

The vote of thanks was carried by acclamation.

The President: Mr. John Denman, what you have just said and done was quite unexpected by me, and I hardly know how to reply, except that I would say that I do not really care for your simile. Bubbles come to the top; gems sink to the bottom, and are only disclosed if the rest of the ocean goes dry above them. I thank you all sincerely for the way you have responded to what Mr. Denman has said.

Nominations for the 1950 Council

In accordance with a decision of the Council candidates nominated for election have been asked to give the following brief particulars for the information of members:—
(A) Address; (B) Date of birth; (C) Degrees, affixes, prizes, publications and distinctions; (D) Type of experience, e.g. official or private practice; (E) Type of practice, e.g. churches, schools, housing, industrial, etc.; (F) Previous service on R.I.B.A. Council and Committees, the Architectural Association or an Allied Society; (G) Military or any other form of national service.
The following candidates have been nominated:

AS MEMBERS OF COUNCIL

Alexander: Thomas MacKelvie. Nominated by H. Banister, Ernest Gee, F. J. M. Ormrod, F. C. Saxon, *Fellows*; W. H. Glen Dobie, F. O. Lawrence, Wm. Louis Lowe, *Associates*. (A) 60 Castle Street, Liverpool, 2; (B) 18 March 1888; (C) F.R.I.B.A., F.R.I.C.S.; (D) Private Practice; (E) Banks, Business Premises, Housing and Industrial; (F) Member of Council, 1942-47; Practice Committee, 1943 to date; Joint Committee of Architects and Quantity Surveyors, 1944 to date; President, Liverpool Architectural Society, 1942-47; Member of Council, Liverpool Architectural Society, 1942 to date. (G) Royal Observer Corps and Civil Defence.

Andrews: Cyril Douglas. Nominated by S. A. Farmer, *Fellow*; F. D. Craddock, B. R. Musgrave, S. Rubery, *Associates*; A. W. Congdon, R. R. Grant, E. W. Rowe, *Licentiates*. (A) 'Sherwood', 18 Essex Road, Enfield, Middlesex. (B) 29 December 1894; (C) F.R.I.B.A. (D) Official; (E) Mainly Hospitals, etc.; (F) Hospitals Committee (Joint Vice-Chairman); (G) Royal Engineers 1915-18, C.D. Essential Hospital Repairs, etc.

Bain: Victor. Nominated by the Council under Bye-law 34. (A) 3 Queen Square, Leeds, 2; (B) 13 June 1887; (C) F.R.I.B.A., National Planning; (D) Private Practice; (E) General: Banks, Schools, various Industrial Works, Garages, Offices, Swimming Baths; (F) R.I.B.A. Council, 1935-37, 1939-1949; the Allied Societies Conference, 1934-36; Chairman, 1939-40; Science Standing Committee, 1935-38; Town and Country Planning Committee, 1935-38; Practice Committee, 1944-50; West Yorkshire Society, Member of Council, 1922-50; President, 1934-36. (G) Service 1914-17 in Northern France. U.P.S. Brigade of Royal Fusiliers; Durham Light Infantry. Invalided out of Service 1917.

Briggs: Martin Shaw. Nominated by the Council under Bye-law 34. (A) 'The Orchard', High Street, Mill Hill, N.W.7; (B) 25 October 1882; (C) A.R.I.B.A., 1905, F.R.I.B.A., 1919; Godwin Bursar, 1914; Publications: Numerous books and articles; (D) Private, 1910-23; Official appointment, 1923-45; (E) General; (F) Literature and Library Committees intermittently since 1913 (Chairman, 1929-31, 1933-35); Board of Architectural Education, 1946-50 (Chairman, 1948-50); Council and Executive, 1929-31, 1933-35, 1948-50; (G) Army, 1915-19 (Overseas, 1916-19); Civil Defence, 1940-45.

Bucknell: Leonard Holcombe. Nominated by John Murray Easton, C. Lovett Gill, C. H. James, F. Leslie Preston, Howard Robertson, L. Sylvester Sullivan, T. S. Tait, *Fellows*. (A) 70 Madeley Road, Ealing, London, W.5; (B) 1887; (C) F.R.I.B.A.; *Industrial Architecture*; (D) Private; (E) Commercial, Laboratories, Offices, Public and Domestic; (F) Chairman, Art Standing Committee, 1939; President, A.A., 1938-39; (G) Commission, R.E., 1914-18 War.

Cartwright: Thomas Nelson. Nominated by the Council under Bye-law 34. (A) 6 Clarendon Street, Nottingham; (B) 16 May 1905; (C) D.S.C., F.R.I.B.A., J.P.; (D) Private Practice; (E) Commercial and Industrial, Hospitals; (F) Member of Allied Societies' Conference; Vice-President of Nottingham, Derby and Lincoln Architectural Society; (G) 6 years in R.N.: D.S.C. and two Bars; twice Mentioned in Despatches; War Service Rank, Commander R.N.V.R.

Chitty: Anthony Merlott. Nominated by the Council under Bye-law 34. (A) 20 Gower Street, London, W.C.1; (B) 10 December 1907; (C) M.A.(Cantab.), F.R.I.B.A., A.M.T.P.I., A.A. Dipl.; (D) Private Practice; (E) General; (F) R.I.B.A. Council 1946-47, 1948-49, 1949-50; also Finance Committee, P.R. Committee, A.S.B., Board of Arch. Ed.; A.A. Hon. Secretary, 1947-48; Vice-President, 1949-50; (G) Assistant Director of Aeroplane Factories (Ministry of Aircraft Production).

Clarke Hall: Denis. Nominated by the Council under Bye-law 34. (A) 6 Mason's Yard, Duke Street, St. James's, London, S.W.1; (B) 4 July 1910; (C) F.R.I.B.A., A.A. Dipl.; (D) Private Practice; (E) Schools and Miscellaneous; (F) R.I.B.A. School Design and Construction Committee; (G) Infantry (Private), 1943; Commission, R.E., 1944.

Culpin: Clifford Ewart. Nominated by David Booth, *Fellow*; W. H. Beesley, R. E. Pethybridge, L. W. C. Phillips, W. W. Ryder, U. A. Sherwin, *Associates*; H. F. Bateman, *Licentiate*. (A) 3 Southampton Place, London, W.C.1; (B) 15 July 1904; (C) F.R.I.B.A.; First Premium, Bridlington Competition for 800 houses and flats, shops, etc.; (D) Private Practice; (E) Civic Buildings, Schools, Housing; (F) Member of Codes of Practice Committee; (G) 5½ years Military Service, Major, R.E.

Conolly: Harold. Nominated by the Council under Bye-law 34. (A) County Architect, County Hall, Chelmsford, Essex; (B) 23 May 1901; (C) F.R.I.B.A.; Hon. Mention R.I.B.A. Silver Medal Essay, 1936; (D) Official Architect since 1937; previously City Architect, Bradford; (E) All types of Local Authority work; Housing, Schools, Hospitals, Offices, Factories, Department Stores; (F) Member R.I.B.A. School Design and Construction Committee, Member of A.R.C.U.K.; (G) Civil Defence.

Denman: John Leopold. Nominated by the Council under Bye-law 34. (A) 27 Queen's Road, Brighton, 1, Sussex; (B) 15 November 1882; (C) F.R.I.B.A., J.P., F.S.A., R.I.B.A. Distinction in Town Planning; (D) Private Practice; (E) General; (F) Honorary Treasurer, Chairman of the Finance and House Committee, Professional Conduct Committee, Gold Medal Committee, Representative of R.I.B.A. on Council of A.R.C.U.K., Vice-Chairman of C.A.C., Member of L.R.R.C., Public Relations Committee, Schools Committee; (G) Served with Royal Engineers during 1914-18 War.

Dod: Harold Alfred. Nominated by the Council under Bye-law 34. (A) c/o Messrs. Willink and Dod, Cunard Building, Liverpool, 3; (B) 27 February 1890; (C) M.A. (L'pool), F.R.I.B.A., Sydney Jones Travelling Scholar 1909; (D) Private Practice, 1940-45 Asst. Director, Min. of Aircraft Production (Factories); (E) Banks, Office Buildings, Libraries, University Halls of Residence, Factories, Laboratories, Technical Colleges, Schools; (F) R.I.B.A. Council, 1938-41; President, Liverpool Architectural Society, 1938-41; (G) 1914-18, War Service in France, Belgium and Germany; Retiring Rank: Captain, General Staff; Croix de Guerre Avec Etoile 1918.

Eberlin: Albert Edgar. Nominated by F. A. Broadhead, C. H. Calvert, T. Nelson Cartwright, R. E. M. Coombes, R. W. Cooper, H. H. Dawson, C. F. W. Haseldine, T. Cecil Howitt, *Fellows*. (A) 3 College Street, Nottingham; (B) 18 March 1895; (C) A.R.I.B.A. 1921, F.R.I.B.A. 1939; President, Nottingham, Derby and Lincoln Architectural Society, 1939-41; (D) Private Practice for 27 years, commencing 1923; (E) Hotels, Licensed Houses, Private Houses, Industrial Buildings, Banks, Shops, Offices, Schools, and Hospital Work; some Arbitration; (F) Rep. N.D. and L.A.S. on R.I.B.A. Council and Committees, 1939-41; Present Rep. R.I.B.A. on Council for Further Education in E. Mid.; Secretary, N.D. and L.A.S. Design Club, 1924, and for some years; N.D. and L.A.S. Council, approx. 1930-47, and re-elected 1950; Advisory Committee, Nottingham School of Architecture, 1940 to present date; (G) Served in H.M. Forces 1914-19, of which 19 months was overseas in France and Belgium till wounded; twice Mentioned in Despatches and awarded Military Cross; 1939-45, Commander of Rescue Division in Nottingham (Volunteer).

Edwards: John Ralph. Nominated by the Council under Bye-law 34. (A) 37 Oakfield Road, Clifton, Bristol, 8; (B) 7 September 1891; (C) F.R.I.B.A., F.S.A., A.R.W.A.; (D) Private Practice; (E) Churches, Schools, Domestic, Industrial and Restoration of Ancient Buildings; (F) R.I.B.A. Council 1941-46 (representing Wessex Society); Past President, Wessex Society and Bristol Society, etc.; Practice Committee since 1944; Regional Representative on Building and Civil Engineering Joint Production Committee, Ministry of Works; (G) Late Captain, Royal Artillery; twice Mentioned in Dispatches; also Civil Defence; Deputy Commissioner, War Damage Commission.

Gardner: Alfred Herbert. Nominated by Edward Holman, *Fellow*; Brian Bailey, R. J. B. Christie, H. Locksley Hare, John L. Osborne, A. S. B. Pimm, Keith Wainwright, *Associates*. (A) 11 Eaton Road, Coventry; (B) 22 April 1902; (C) F.R.I.B.A.; author *Outline of English Architecture* (Batsford); (D) Private; (E) General and varied; (F) Vice-President, Birmingham and Five Counties A.A., 1948-50; Chairman, Coventry Chapter, 1947-49; (G) —.

Gibberd: Frederick. Nominated by the Council under Bye-law 34. (A) 35 Gordon Square, London, W.C.1; (B) 1908; (C) F.R.I.B.A., M.T.P.I.; (D) Private, and Part-time Official as Architect Planner to Harlow New Town; (E) Architecture and Town Planning; (F) Member of Council since 1945; Member of Executive of Council, 1948-49; (G) —.

Harland: Peter John Blundell. Nominated by Harold Cherry, John Murray Easton, R. E. Enthoven, C. H. James, Arthur W. Kenyon, J. Alan Slater, *Fellows*; R. A. Duncan, *Associate*. (A) 23 Dorset Street, Gloucester Place, London, W.1; (B) 16 April 1900; (C) F.R.I.B.A., A.A. Dipl.; (D) Private Practice; (E) Hospitals, Schools, etc.; (F) Former Member of the Council of the Architectural Association; (G) Six years in Army, 1939-45.

Kennard: Cecil. Nominated by Darcy Braddell, F. Milton Cashmore, L. A. Chackett, Romilly B. Craze, E. M. Joseph, *Fellows*; A. Naglovsky, F. W. Wilson, *Associates*. (A) 227 Kensington High Street, London, W.8; (B) 12 November 1896; (C) O.B.E., F.R.I.B.A., F.R.I.C.S.; (D) Official; (E) Experience as an Official and previously as a Practising Architect of all types of buildings and structures; (F) Examinations Committee of Board of Architectural Education; (G) Military Service: Royal Engineers, 1917-19; Civil Defence: Rescue and War Debris Services, 1939-45.

Pierce: Stephen Rowland. Nominated by A. R. F. Anderson, John Murray Easton, R. E. Enthoven, C. Lovett Gill, Arthur W. Kenyon, P. J. B. Harland, *Fellows*; W. W. Atkinson, *Associate*. (A) 14 Chepstow Place, London, W.2; (B) 1896; (C) F.R.I.B.A., R.I.B.A. Distinction in Town Planning, Rome Scholar in Architecture; numerous articles in Architectural Journals, etc.; Joint-Author, *Planning*, by 'E. & O.E.'; (D) Private; (E) Public Buildings, Houses, Banks, Industrial, Town Planning, etc.; (F) Exhibition and Town Planning Committees, Schools and Prizes Committees; Hon. Secretary, Library Committee; Member of the Boards of Architectural Education of R.I.B.A. and A.R.C.U.K.; Member of the Faculty of Architecture of British School at Rome. Past Member of Council and Past Hon. Librarian of A.A. (G) Ministry of Works and Ministry of Supply, 1940-41.

Stillman: Cecil George. Nominated by Denis Clarke Hall, Howard Vicars Lobb, *Fellows*; Cyril Sjostrom Mardall, Thomas Carlyle Ralph, John S. P. Vulliamy, Frank George West, David Marshall Millwood Wilson, *Associates*. (A) Middlesex County Council, 10 Great George Street, London, S.W.1; (B) 6 April 1894; (C) M.M., F.R.I.B.A.; (D) Official; (E) Local Government Practice: Schools, Hospitals, Police and Fire Services, etc.; (F) Vice-President, R.I.B.A.; on Council, 1939-49; Executive Committee; Hospital Committee; School Design Committee; Salaried and Official Architects' Committee; (G) 1914-18, R.E.; 1939-45, Civil Defence and Home Guard.

Surman: John Burgess. Nominated by Edward Holman, *Fellow*; Brian Bailey, R. J. B. Christie, H. Locksley Hare, John L. Osborne, A. S. B. Pimm, Keith Wainwright, *Associates*. (A) 16 Harborne Road, Edgbaston, Birmingham, 15; (B) 1884; (C) Fellow, Deputy Director of Birmingham School of Architecture from 1928-33; (D) Private Practice; (E) Commercial and Industrial Works, Banks and Domestic, School Buildings and Ecclesiastical Works; (F) Past President of Birmingham and Five Counties Architectural Association, Prizes Committee, etc.; (G) Invalided from Military Service 1914-18, Special Constabulary Service 1939-44.

Swarbrick: John. Nominated by H. Anderson, Ernest Bird, H. O. Corfiato, Sir Banister Fletcher, J. H. R. Freeborn, T. Gordon Jackson, H. Kenchington, A. N. Malcolm, Briant Poulter, A. E. Richardson, John B. Surman, *Fellows;* Laurence Macintosh, *Associate*; H. Norman Haines, Dudley W. Joel, Herbert G. Tilley, *Licentiates*. (A) 3 King's Bench Walk, Temple, London, E.C.4; (B) 22 May 1879; (C) F.R.I.B.A., F.S.A., M.Inst. Struct.E.; A.A. Silver Medallist 1903; R.A. Silver Medallist 1904; Publications: *Robert Adam, Easements of Light*, etc. Editor, *National Ancient Monuments Review*; (D) Official and Private; (E) Churches, Schools, Business and Domestic premises; (F) R.I.B.A. Council 1939-49, R.I.B.A. Architectural Science Board, Practice Committee, Joint Committee on Law of Ancient Lights, School Design Committee, Prof. Text and Reference Books Committee, Hon. Secretary of the Manchester Society of Architects for 11 years; (G) Emergency Works Officer (Ministry of Works) for Cumberland, Westmorland, North and Central Lancs; Chief Technical Officer, Board of Trade (Northern Region); Codes of Practice Officer, Dept. of Scientific and Industrial Research.

Waters: Alwyn Brunow. Nominated by the Council under Bye-law 34. (A) 'Woodfield', Burtons Lane, Chalfont St. Giles, and 103 Old Brompton Road, South Kensington, London, S.W.7; (B) 18 September 1906; (C) M.B.E., G.M., F.R.I.B.A.; Author of *The Story of a House* and various papers and articles. Joint winner of second premium for Competition for Community Centre and Fire Station at Ilkeston 1938. Member of the Governing Body of Willesden Technical College; (D) Private Practice and Technical Education; (E) Schools: Commercial and Industrial; Housing; Church work; Boys' Clubs and Hostels: Joint Consulting Architect to the National Association of Boys' Clubs; Principal, The Ellis School of Building; (F) Council of Berks, Bucks and Oxon Architectural Association; Committee of the Bucks Society of Architects; Prizes and Scholarships Committee of Board of Architectural Education; Sub-Committee of the R.I.B.A. Public Relations Committee; (G) October 1940 to December 1945. Major, R.E. (Bomb Disposal). Wounded, Normandy, June 1944. M.B.E. (Mil.) 1943. G.M. 1944.

Wornum: George Grey. Nominated by the Council under Bye-law 34. (A) 19 Queen Anne's Gate, London, S.W.1; (B) 17 April 1888; (C) F.R.I.B.A., Hon. Corresponding Member American Institute of Architects, A.A. Silver Medal and Travelling Studentship 1909, R.I.B.A. London Architecture Bronze Medal 1938, Part Author, *Building Centre Housing Book*, Author with John Glory, *House out of Factory*; (D) Private; now in practice with Edward Playne (incorporating Sir Aston Webb and Son); served in M.o.W. during the War as Assistant Director of Post-War Building; (E) General: R.I.B.A. Premises; Westminster Highway Building; considerable Housing Work; Decoration Architect for s.s. Queen Elizabeth; British Girls' College, Alexandria, Egypt; Office Buildings; Domestic Work, etc.; (F) Many years Member of Council and Committees; Past President, A.A. 1930; (G) Served in Army 1914-18; in France 1915-16.

AS ASSOCIATE MEMBERS OF COUNCIL

Allen: William Alexander. Nominated by Professor W. G. Holford, Leonard C. Howitt, R. Furneaux Jordan, Richard Sheppard, Gordon Stephenson, Sydney Tatchell, *Fellows*; S. A. W. Johnson-Marshall, *Associate*. (A) Ashley Close, Welwyn Garden City, Herts; (B) 29 June 1914; (C) B.Arch., A.R.I.B.A.; University Gold Medal, 1936; publications on Lighting, Town Planning, Sound Insulation and Acoustics, as well as on Science in Relation to Architecture; (D) Private, with L. de Soissons; Official, Building Research Station, as a Principal Scientific Officer; (E) Advisory Work on Industrial Buildings; Schools and Concert Halls; (F) Library Committee for several years; Text and Reference Books Committee since its inception; (G) —.

Allsopp: Harold Bruce. Nominated by the Council under Bye-law 34. (A) School of Architecture, King's College, Newcastle-upon-Tyne; (B) 4 July 1912; (C) B.Arch. Dip. C.D. (L'pool), A.R.I.B.A., A.M.T.P.I., *History of Decoration and Furniture* (in the Press); (D) Official, Private, Teaching; (E) Ecclesiastical, Public Buildings, University Buildings; (F) Hon. Librarian, Northern

Architectural Association; Council of N.A.A.; (G) Capt., R.E., North Africa, Italy (8th Army).

Barrett: Walter. Nominated by Delamark F. Ingleton, *Fellow*; James Brown, Geoffrey P. Platt, Gilbert Ray, *Associates*; Philip F. Lawson, Cyril J. P. Lloyd, W. Douglas Owen, *Licentiates*. (A) 'Lanbury', Uzmaston Road, Haverfordwest, Pembrokeshire. (B) 28 March 1899; (C) A.R.I.B.A., M.B.E. (Military); (D) County Architect, Pembrokeshire; (E) —; (F) —; (G) 1917-19, Royal Flying Corps; 1940-46, Royal Engineers.

Brett: Hon. Lionel Gordon Baliol. Nominated by the Council under Bye-law 34. (A) Watlington Park, Oxford; (B) 18 July 1913; (C) M.A., A.R.I.B.A.; Ashpitel Prizeman 1939; Distinction in Thesis; Publications: *Houses* in Penguin Series, and numerous critical articles and broadcasts; (D) Private; (E) Housing, Town Planning, Commercial; (F) Library Committee, Public Relations Committee; Industrial Architecture Group; (G) Royal Artillery, 1940-45 (Britain, France, Germany).

Cadbury-Brown: Henry Thomas. Nominated by the Council under Bye-law 34. (A) 17 Clarges Street, London, W.1; (B) 13 May 1913; (C) A.R.I.B.A., A.A. Dipl.; (D) Private Practice; (E) Housing, Domestic, Commercial; (F) Public Relations Committee, Housing Committee; (G) Royal Artillery, 1939-45.

Fairbairn: Richard Robert. Nominated by S. B. Caulfield, Alan Marlow, Howard Robertson, *Fellows*; R. D. Hammett, J. M. Maxwell, C. A. R. Norton, Douglas Taylor, *Associates*. (A) 81 Piccadilly, London, W.1; (B) 23 September 1916; (C) M.C., Legion of Merit (U.S.A.), A.R.I.B.A., A.A. Dipl.; (D) Private Practice; (E) Housing, Office Buildings, Commercial and Industrial Buildings, (F) Member of Students' Committee; Architectural Association, 1936-39; (G) 1939 (Lieut.), 1946 (Lt.-Colonel), Field Units, R.E.

Fowkes: Charles Roy. Nominated by W. S. Grice, *Fellow*; Miss K. M. Carroll, R. H. Cowley, N. V. A. Crick, Miss A. E. C. Dunand, D. T. Edwards, C. A. Legerton, C. G. Liardet, S. B. Porteous, G. B. Vint, *Associates*. (A) Deputy Chief Architect and Surveyor, New Scotland Yard, London, S.W.1; (B) 1 May 1908; (C) A.R.I.B.A., A.M.T.P.I.; twice Finalist Tite Prize and Certificate of Honourable Mention; Part Author with F. R. S. Yorke of *Flooring Materials*, pub. Faber and Faber; (D) Both Official and Private Practice; with Ministry of Works as Senior Architect; Ministry of Health as Senior Architect; and Police Deputy Chief Architect; six buildings designed when in Private Practice in Royal Academy Exhibition at various times; (E) Extensive Housing Work both Traditional and Non-traditional, Estate Layouts, Houses and Flats; Specialist Industrial Buildings; Country Houses and interior work connected therewith; Hotels, Cinemas; Member of numerous British Standard Committees; (F) R.I.B.A. Town and Country Planning Committee until 1949; for a time Technical Officer to R.I.B.A. Business Buildings Committee convened by Ministry of Works; (G) —.

Johnson-Marshall: Stirrat Andrew William. Nominated by the Council under Bye-law 34. (A) Chief Architect, Ministry of Education, Curzon Street, London, W.1; (B) 19 January 1912; (C) B.Arch. (L'pool), A.R.I.B.A.; Articles in Professional Journals and Architectural Press; (D) Private Practice, and since 1937 Official; (E) Educational Buildings, Housing, Industrial, Civic; (F) R.I.B.A. School Design and Construction Committee, Executive of Herts Chapter of Essex, Cambs and Herts Society; Building Research Board, D.S.I.R.; Advisory Council on Building Research and Development, Ministry of Works; (G) Royal Engineers 1939-45, including overseas service.

Madeley: Charles Stanbury. Nominated by Edward Holman, *Fellow*; Brian Bailey, R. J. B. Christie, H. Locksley Hare, John L. Osborne, A. S. B. Pimm, Keith Wainwright, *Associate*. (A) 67a New Street, Birmingham, 2; (B) 19 February 1887; (C) A.R.I.B.A.; (D) General Private Practice and Lecturing; (E) Domestic and Factory; Lecturer at Birmingham School of Architecture 36 years; (F) Vice-President, Birmingham and Five Counties Architectural Association 1939-41, and 20 years as Member of Council; (G) —.

Matthew: Robert Hogg. Nominated by the Council under Bye-law 34. (A) 36 Kensington Square, London, W.8; (B) 12 December 1906; (C) A.R.I.B.A., R.I.B.A., Distinction in Town Planning, Pugin Student, Soane Medallist, Cates Prizeman, Bossom Medallist; Clyde Valley Planning Report with Sir Patrick Abercrombie; (D) Private Practice (Scotland); Government, and now Local Government Service; (E) Present work includes Housing, Schools, and many types of special buildings, e.g. a New Concert Hall, London; (F) Town Planning Committee, Salaried and Official Architects' Committee (Rep. on Council); (G) Government Service during 1939-45.

Shepheard: Peter Faulkner. Nominated by the Council under Bye-law 34. (A) 42 Bruton Place, Berkeley Square, London, W.1; (B) 11 November 1913; (C) B.Arch., A.R.I.B.A., A.M.T.P.I.; (D) Formerly Official, now Private Practice; (E) Mixed, mainly Schools and Housing; (F) R.I.B.A. Town and Country Planning and Housing Committee, R.I.B.A. Public Relations Committee, Schools Committee, Board of Arch. Education; A.A. Council; (G) —.

Webster: Sydney. Nominated by K. Douglas Bundy, G. Hamilton Gould, Anthony Medlycott, Thomas Peatfield, J. A. C. Platts, Alan Reed, Mrs. G. Margaret Whitaker, *Associates*. (A) 83 Latymer Court, London, W.6; (B) 18 April 1915; (C) Dipl. Arch. (Leeds), Dipl. T.P. (Leeds), A.R.I.B.A., A.M.T.P.I.; (D) Official up to and during World War II; Private Practice since; (E) Housing; (F) —; (G) Employed in Civil Engineer-in-Chief's Dept., Admiralty (1939-45).

Whitaker: (Mrs.) Grace Margaret (*née* **Turner**). Nominated by K. Douglas Bundy, G. Hamilton Gould, Anthony Medlycott, Thomas Peatfield, J. A. C. Platts, Alan Reed, Sydney Webster, *Associates*. (A) 17 Gayfere Street, Westminster, London, S.W.1; (B) 24 March 1913; (C) A.R.I.B.A., A.A. Dipl.; (D) Official during the War, but now have own Private Practice; (E) General, principally Housing; (F) —; (G) —.

Whitby: George Frederick. Nominated by the Council under Bye-law 34. (A) 28 Great Ormond Street, London, W.C.1; (B) 17 August 1916; (C) M.B.E., A.R.I.B.A.; (D) Assistant in Private Practice pre-war and Independent Practice since the war; (E) Public Buildings and Schools; (F) R.I.B.A. Practice Committee 1947 to date; R.I.B.A. Official and Salaried Architects' Committee 1949 to date; A.R.C.U.K. Admission Committee 1948 to date; (G) 1939-47 Royal Engineers (mainly Field Units).

Womersley: John Lewis. Nominated by B. C. Deacon, W. Rosser, *Fellows*; E. W. Cowell, H. Hartley, E. J. Storry, *Associates*; F. B. Allen, S. V. Goodman, *Licentiates*. (A) Guildhall, Northampton; (B) 12 December 1910; (C) A.R.I.B.A., A.M.T.P.I., Nicholson Travelling Scholarship (West Yorks S.A.) 1933, Measured Drawings and Sketches Prize (West Yorks S.A.) 1933, 2nd Premium Fylde Water Board Offices Competition 1939 (in collaboration with Mr. J. M. Gornall); (D) 9 years Private Offices London and the Provinces; 5 years Assistant to Mr. Herbert J. Rowse, Liverpool; 4 years Borough Architect and Town Planning Officer, Northampton County Borough; (E) Private Practice: Housing, Hospitals, Churches, Commercial; Official Practice: Housing, Schools, Town Planning; (F) Liverpool Architectural Society: Various Committees 1944-46; Northants, Beds and Hunts A.A. Council and Northampton Executive Committee 1947-50; City and Borough Architects' Society: Executive Committee 1948-50; (G) In charge of layout and erection of British and U.S.A. Army Camps, Miners' Hostels, Engineering Works, Quarters for Factory Workers.

AS LICENTIATE MEMBERS OF COUNCIL

Clay: John. Nominated by the Council under Bye-law 34. (A) Dalkeith, South Normanton Common, Derbyshire; (B) 25 January 1908; (C) L.R.I.B.A., A.M.T.P.I., Dipl. T.P.; (D) Official and Private; Senior Architect, Ministry of Health; (E) Public Health, Housing, Schools, Industrial; (F) Member of the Council, Nottingham, Derby and Lincoln Architectural Society; (G) Special Constable.

Hall: John Campbell. Nominated by the Council under Bye-law 34. (A) Marmuran, Galashiels; (B) 25 November 1888; (C) L.R.I.B.A.; (D) Private and Official; (E) Schools, Public Works, Housing, Industrial and Commercial; (F) Member of Committee of the Edinburgh Architectural Association for 5 years; (G) 1914-18 Royal Engineers, 1939-45 A.R.P. Organizer, County of Selkirk A.R.P.

Whitehouse: Sidney Lunn. Nominated by the Council under Bye-law 34. (A) New Eldon Chambers, 50 Cherry Street, Birmingham, 2; (B) 4 February 1896; (C) L.R.I.B.A.; (D) Private Practice, Lecturer and Teacher, Birmingham School of Architecture; (E) Churches, Welfare Buildings, X-ray Laboratories, Commercial, Industrial and General Practice; (F) R.I.B.A. Council 1935-45, Art Standing Committee 1932-35, Licentiateship Committee 1946 to date, Past Hon. Treasurer and Hon. Secretary of Allied Societies Secretaries' Conference; Examiner in Professional Practice; Birmingham and Five Counties Architectural Association: Hon. Secretary 1929-33; Member of Council, Advisory, Library and Education Committees; Vice-President; (G) 1914-19 Royal Engineers and Royal Flying Corps; 1939-45 Civil Defence and Hon. Assistant Regional Technical Intelligence Officer.

ATTENDANCES AT COUNCIL MEETINGS (Session 1949-50)

(UNLESS OTHERWISE STATED THE MEMBERS' ADDRESSES ARE IN LONDON)

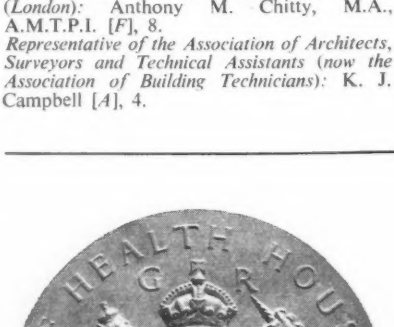
THE COUNCIL (9 Meetings)

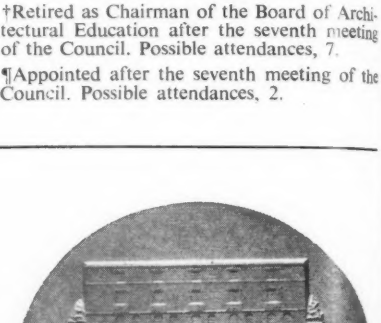
President: Michael T. Waterhouse, M.C., 8.

Vice-Presidents: C. H. Aslin (Hertford), 9; A. Graham Henderson, A.R.S.A. (Glasgow), 7; Arthur W. Kenyon, C.B.E., M.T.P.I., 9; A. B. Knapp-Fisher, F.S.A., 9.

Honorary Secretary: A. Leonard Roberts (Winchester), 9.
Honorary Treasurer: *John L. Denman, J.P. (Brighton), 6.
Members of Council: C. H. Aslin (Hertford), 9; J. Murray Easton, 6; R. E. Enthoven, 8; P. G. Fairhurst, M.A. (Manchester), 7; J. H. Forshaw, M.C., M.A., M.T.P.I., 8; E. Maxwell Fry, 5; Frederick Gibberd, 4; Professor W.G. Holford, M.A., M.T.P.I., 5; Leonard C. Howitt, B.Arch., A.M.T.P.I. (Manchester), 7; T. Cecil Howitt, D.S.O., O.B.E. (Nottingham), 8; Arthur W. Kenyon, C.B.E., M.T.P.I., 9; A. B. Knapp-Fisher, F.S.A., 9; S. W. Milburn, M.B.E., M.C., T.D. (Sunderland), 5; Howard Robertson, M.C., A.R.A., 7; Herbert J. Rowse (Liverpool), 6; Richard H. Sheppard, 9; Sir Hubert Worthington, O.B.E., M.A.(Arch.), A.R.A., Hon. A.R.C.A., M.T.P.I. (Manchester), 3; F. R. S. Yorke, 7.
Associate Members of Council: Professor J. S. Allen, B.Arch., M.T.P.I. (Newcastle-upon-Tyne), 7; Henry Braddock, 9; Professor R. Gordon Brown (Edinburgh), 6; D. E. E. Gibson (Coventry), 0; Joseph L. Gleave, M.A. (Edinburgh), 3; R. A. H. Livett, O.B.E. (Leeds), 7; Andrew Rankine, O.B.E. (Hull), 5; Ralph Tubbs, 4; R. H. Uren, 4.
Licentiate Members of Council: Bernard H. Cox (Cardiff), 7; Charles Oliver (Hull), 8; F. C. Wakeford (Hayes, Kent), 8.
Past Presidents: H. S. Goodhart-Rendel, 8; Sir Lancelot Keay, K.B.E., M.Arch. (L'pool) (Liverpool), 1. *Representatives of Allied Societies in the United Kingdom or Eire: Northern Province of England:* F. Austin Child, A.M.T.P.I. [*F*] (Northern Architectural Association), 7; F. Leslie Halliday, A.M.T.P.I. [*F*] (Manchester Society of Architects), 9; F. C. Saxon, M.C., F.R.I.C.S. [*F*] (Liverpool Architectural Society), 8; A. Newton Thorpe [*F*] (York and East Yorkshire Architectural Society), 8; Benjamin Chippindale [*F*] (West Yorkshire Society of Architects), 5; Professor Stephen Welsh [*F*] (Sheffield, South Yorkshire and District Society of Architects and Surveyors), 6. *Midland Province of England:* F. J. Osborne, M.C. [*F*] (Birmingham and Five Counties Architectural Association), 7; T. W. Haird [*F*] (Leicester and Leicestershire Society of Architects), 5; S. V. Goodman [*L*] (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects), 3; C. F. W. Haseldine [*F*] (Nottingham, Derby and Lincoln Architectural Society), 8; Stanley J. Wearing F.S.A. [*F*] (East Anglian Society of Architects) 3. *Southern Province of England:* H. M. R. Drury [*F*] (Devon and Cornwall Architectural Society), 7; R. S. Redwood [*A*] (Wessex Society of Architects), 9; T. Talfourd Cumming [*F*] (Berks, Bucks and Oxon Architectural Association), 9; Ernest Bird [*F*] (Hampshire and Isle of Wight Architectural Association), 8; Lewis J. F. Gomme [*L*] (Essex, Cambridge and Hertfordshire Society of Architects), 7; Harold Anderson [*F*] (South Eastern Society of Architects), 9. *Allied Societies in Scotland:* T. S. Cordiner [*F*] (Glasgow), 6; Leslie Grahame-Thomson, R.S.A., F.S.A., Scot. [*F*] (Edinburgh), 5; Lockhart W. Hutson, O.B.E. [*F*] (Hamilton), 7; A. N. Malcolm [*F*] (Stirling), 8. *Allied Societies in Wales:* Edwin Smith, F.R.I.C.S. [*F*] (South Wales Institute of Architects), 9. *Allied Societies in Ireland:* Francis McArdle, M.Sc., B.E. [*F*] (Royal Institute of the Architects of Ireland), 3; Valentine Smyth [*A*] (Royal Society of Ulster Architects), 2.
Representatives of Societies in Alliance with the Royal Institute Overseas: Forsey Page, F.R.A.I.C. [*F*] (The Royal Architectural Institute of Canada), 0; L. Sylvester Sullivan [*F*] (Representative in the United Kingdom), 5; Adrian Ashton [*A*] (The Royal Australian Institute of Architects), 1; Sir Hubert Worthington, O.B.E., M.A.(Arch.), A.R.A., Hon. A.R.C.A., M.T.P.I. [*F*] (Representative in the United Kingdom), 3; H. L. Massey, A.M.T.P.I. [*F*] (The New Zealand Institute of Architects), 0; J. Murray Easton [*F*] (Representative in the United Kingdom), 6; S. N. Tomkin, B.Arch. [*A*] (The Institute of South African Architects), 0; Michael T. Waterhouse, M.C. [*F*] (Representative in the United Kingdom), 8; ‡C. M. Master, M.A. [*F*] (The Indian Institute of Architects), 0; ‡H. A. N. Medd [*F*] (Representative in the United Kingdom), 6.
Representative of the Architectural Association (London): Anthony M. Chitty, M.A., A.M.T.P.I. [*F*], 8.
Representative of the Association of Architects, Surveyors and Technical Assistants (now the Association of Building Technicians): K. J. Campbell [*A*], 4.

Chairman of the Board of Architectural Education: †Martin S. Briggs [*F*], 6; ¶Kenneth M.B. Cross, M.A. [*F*], 2.
Chairman of the R.I.B.A. Registration Committee: Lieut.-Colonel V. H. Seymer, D.S.O., M.C., F.S.A. [*F*], 8.
Two Representatives of the R.I.B.A. Salaried and Official Architects' Committee: *P. K. Hanton, O.B.E. [*F*], 8; *R. H. Matthew [*A*], 4.
Marked thus:
*Were appointed at or after the first meeting of the Council. Possible attendances, 8.
‡Were appointed after the second meeting of the Council. Possible attendances, 7.
†Retired as Chairman of the Board of Architectural Education after the seventh meeting of the Council. Possible attendances, 7.
¶Appointed after the seventh meeting of the Council. Possible attendances, 2.





Ministry of Health Housing Medal

The photographs illustrate the Housing Medal to be awarded each year by the Minister of Health for the best designed local authority housing schemes in each of the eleven housing regions of England and Wales. In ten regions awards will be made to the best urban and rural schemes, and in London to the best schemes of new development and of reconstruction.

The sculptor responsible for the design and modelling is Mr. T. H. Paget, O.B.E., and the medal, 2¼ in. in diameter, is being struck in bronze at the Royal Mint.

The obverse carries the Royal Arms with inscription in bold relief. The reverse depicts a terrace of small houses based on the design of those formerly existing in *Munster Square; a decorative panel with laurel wreath over plans and models. The medals awarded in Wales through the office of the Welsh Board, will bear an engraved inscription in Welsh, 'Gwell gwr o'i barchu'.

As stated in the March JOURNAL the Regional Awards Committee for 1950 have now been set up by the Ministry in collaboration with the R.I.B.A., and the entries for the first awards covering the post-war period ending December 1949 are now being considered.

The medal is intended to recognize the merit of the design of the estate, and each award will be made individually to the architect or designer, who will also receive a diploma signed by the Minister and the Chairman of the Awards Committee. A separate diploma recording the selection of the Council's scheme will be presented to the local authority.

The photographs are copyright of the Royal Mint.

* *Munster Square, known earlier as York Square, in the area adjoining Regent's Park planned by John Nash. The terrace housing around the square was seriously damaged in the London air-raids and is now demolished.*

Productivity Team Report—Building

Anglo-American Council on Productivity

Report of a visit to the U.S.A. in 1949 of a Productivity Team representing the Building Industry. The Report summarized

IN THE AUTUMN of 1948 the Anglo-American Council on Productivity came into being; it was set up on the initiative of Sir Stafford Cripps, Chancellor of the Exchequer in Britain, and Mr. Paul Hoffman, the Economic Co-operation Administrator in the U.S.A. It is composed of representatives of management and labour both in the United Kingdom and in the United States of America. In the United Kingdom the constituent bodies are the Federation of British Industries, the British Employers' Confederation, and the Trades Union Congress. The purpose of the Council is to promote economic well-being by a free exchange of knowledge in the realm of industrial organization, method and technique, and thereby to assist British industry to raise the level of its productivity. To achieve this end the principal means adopted is to send industrial teams to America, the members being drawn in equal numbers from the supervisory, the technical and the workshop levels. Their business is to study American production methods, to report their observations and findings, and to make recommendations. Each team is solely responsible for its report.

To carry out these objects a British Building Productivity Team was appointed, representing the building industry, and the team made a visit to the U.S.A. during July and August, 1949. The members were:—for the Management Group, Robert O. Lloyd, (Team Leader), C. Douglas Calverley, Walter R. Cowen, N. Stanley Farrow, Robert S. Gray, and Wilfred Horsfall. For the Professional Group, Robert H. Matthew [*A*], Michael T. Waterhouse, P.R.I.B.A., T. Cuthbertson Hill, F.R.I.C.S., and Montagu H. Thackray, F.R.I.C.S. For the Operatives' Group, J. Patrick Bates, Francis W. Beazley, William J. Clarke, William R. Johnstone, Glynn Lloyd, and John H. McKechnie. The team secretary was C. Gordon Rowlands, Secretary of the National Federation of Building Trades Employers. The report of the team has now been published.

Object of the visit. The team was charged with the duty of examining the organization, constructional techniques and industrial outlook of the American building industry and of drawing conclusions from a comparison of American and British constructional practice likely to increase productivity in the building industry of Great Britain.

The team's return to England on 9 September coincided with ministerial discussions in Washington on Great Britain's external financial position, and shortly afterwards the devaluation of the pound sterling rendered greater productivity even more vital if full advantage was to be taken of the opportunity to increase our exports, particularly to dollar and hard currency areas. Our inability to avoid devaluation showed how precarious is the basis of our present standard of living and how dependant our whole economy today is upon American financial support. When Marshall Aid ends in 1952, Britain's future, and the standard of life of each individual, will again depend, as it did in the past, on the ability of British industry to sell its exports in world markets. The building industry must recognize that the cost of building is reflected both directly and indirectly in the production costs of most of our exports; directly, because the exporting industries need additional buildings and their existing buildings have to be kept in repair, and indirectly, because they have to pay their share of the heavy taxation required by the high level of Government expenditure and a large proportion of current building work is financed from Government funds. Early and substantial reductions in the cost of building work are therefore of great national importance. An individual member of the building industry may feel that he is helpless in the face of world economic forces and that no action he can take in present conditions can affect the outcome. But an industry of the size and importance of the building industry can, if imbued with a sense of urgency, do much to increase its own efficiency and thus assist national economic recovery. The necessary changes will not be made *until large numbers of individuals decide that it is their personal duty to make a move towards the goal of increased output*.

The team's enquiries in the United States were directed, in the first place, to ascertaining whether the American building industry is organized and conducted more efficiently and economically than the British building industry, and, if so, in what respects, to what extent and for what reasons. Secondly, it was necessary to consider whether the conditions which enable the American building industry to operate more effectively could be reproduced, or even approximately reached, in Britain in the immediate future. Finally, what practicable steps could be recommended to enable the British building industry to draw closer to American standards of performance.

The team sought to acquaint itself with the general spirit animating American building industry, the 'American Industrial Climate,' as the report terms it, and as this is a vital factor in considering the differences existing in the same industry in different countries, the conclusions of the team on that matter are quoted in full, as follows:—

'Every member of the team was greatly impressed by the spirit of initiative and co-operation which appears to characterize each section of the American industry and which is shown in the attitude of all towards the work in hand. A general belief in the need for experiment and progress; agreement that an earlier generation's method of approach to any particular problem is in no way sacrosanct but is always capable of improvement; and direct material incentives to self-advancement, coupled with penalties for failure to keep abreast of the times—these are all factors reflected in the speed and efficiency of construction in the United States. The speed with which American buildings of all sizes are erected remains one of the team's deepest impressions. The fixing of 700 tons of steel-work in three and a half days on a State hospital contract and the erection of the frame-work and floors of two storeys of a skyscraper block in one week were perhaps the most remarkable of many instances of speedy building which were seen.

'Speed and efficiency in the U.S.A. are based upon co-operation and organization at all stages—co-operation between the client, the architect or engineer and the contractor; between the general contractor and the sub-contractors; and between all contractors and their operatives. It is based also upon the ready availability of every material and fitting, upon an adequate supply of labour and upon the opportunity thus provided for the complete pre-planning of the whole structure so that each member of the building team can be set a target which he knows that he can and *must* reach. These factors are, of course, fundamental to the efficiency of any industry, and it must be appreciated that, through no fault of the British building industry itself, they are not present in Britain today. Without them the American spirit of initiative would not have full scope, nor could plans for the re-organization of the British building industry have more than temporary effect.

'It must not be thought, however, that the British building industry could afford to be complacent even if the pre-war adequacy in the supplies of labour and materials were to return. American experience shows that the industry as a whole must be determined to progress if it is to maintain a standard of efficiency relative to that of other industries. The impulse of American progress is, of course, derived from the spirit of competition and under its con-

straint all concerned strive continuously to reduce costs.

'As Mr. Philip Reed, Joint Chairman of the Anglo-American Council on Productivity, pointed out to the team at its first meeting in New York, competition is "the burr under the saddle that kept Americans going." It had the very important effect of stimulating them to do new and different things to improve products and get costs down. He expressed the view that "the United Kingdom and other countries of Europe did not seem to benefit from that to the same degree." Our examination of the American building industry has shown us that competition is indeed a spurring force. Architects compete in efficiency in their relations with their clients and with contractors; there are more contractors than contracts, and competition for work is evident both in time and in price. There are more workers than jobs, and there is competition to gain and retain the jobs which provide the high standard of living of the American building operative.

'There is, of course, no lack of competition in the British building industry between contracting firms of all types and sizes. But, taking a broader view, it is clear that, just as individuals are liable to be demoralized by dependence for an indefinite period on unemployment benefit, so nations or industries are less likely to achieve full health and efficiency if, by reason of outside assistance, they are artificially shielded from the ordinary economic processes of competition. For various reasons—some of them fully justified from the national standpoint—building in Britain has been heavily subsidized in recent years. However necessary the subsidies may have been, and whatever the other effects of their removal might be, there is little doubt that they diminish the incentive to secure lower building costs. As the great preponderance of building work in the United States is privately financed, the spirit of initiative of the American industry as a whole is not impaired by any tendency to rely upon a government-guaranteed programme. The operatives no less than the employers realize that, if the industry prices itself out of the market, there will be hardship for all, and this consideration is generally borne in mind in the negotiation of wage agreements. It was particularly noticeable that the leaders of all sections of the American building industry recognize that *its continued prosperity depends upon building costs being kept in relation to the costs of the products of other industry*. Mr. John J. Brennan, Secretary of the Building and Construction Trades Council of New York (the central body of New York operatives), asserted that the trade unions co-operated with the employers' associations and with architects and engineers in a continuous process of designing and trying out new methods to produce a better product at a lower cost. Similar views were expressed by the leaders of the Building Trades Department of the American Federation of Labour. This readiness of the unions to co-operate in the drive for higher productivity is thus shown at local as well as at national level—a point of special importance because local officials can exercise more direct influence upon the men than national leaders who are necessarily more remote from the actual job.'

The report then draws lessons from the above analysis of the mind and temper of the American building industry, because, taking a long view, more is to be learned from the general spirit and outlook of the American industry than from the details of organization and technique to which the report makes reference in subsequent pages, but the team made no major discovery which could conceivably revolutionize British building practice in a short time. It did, however, observe many points in American constructional methods which are collectively of great importance and which, if adopted here, would certainly raise the efficiency of the British industry. For example, the architect can learn something of the artistry of a flexible architecture of inter-changeable units, and the economies to be derived from this conception of planning. American practice can teach him the advantages to the client, to himself, and, also to the contractor of having *all drawings and specifications complete in every respect at the tendering stage*, and the benefit of avoiding unnecessary alterations or changes of mind by either himself or the client during the progress of the work. But, great as can be the architect's contribution to productivity through advance planning and the completeness of all information at bidding stage, his responsibility for organization ends when construction begins.

The fact that job organization is the duty and responsibility of the general contractor is recognized to the full in America. British contractors can derive considerable benefit from studying American methods of organization, including the intelligent and mutually helpful co-operation which exists between general contractor and sub-contractor and between one sub-contractor and another, and the efficient dovetailing of trades on the job which results.

The building operative works hard in return for a high wage-rate, which provides him with a high standard of living, and knows that his personal advancement depends upon his own efforts.

Finally, no one questions that the profit motive is an essential feature of industrial life, or that all sections of the industry must be given the necessary incentives, both psychological and material, to develop a pride both in the work they do and in the social status which they gain from their employment.

The conditions and influences referred to above have all, at one time or another, been present in British industry in full measure. They are temporarily put in the background, but can not be permitted to remain there. The idea that a high standard of comfort is attainable without personal effort has no more foundation than a dream from which the awakenening would be extremely unpleasant.

It is not claimed that the team, in the short space of six weeks, was able to investigate, or even to discover, all the factors which lead to the higher productivity found in America. Nor does it appear that the Americans themselves have discovered, any more than we have, the solution of the problem of securing high productivity *in times of full employment*. Nevertheless, there are many lessons to be learned from the American building industry which no member of the industry here can afford to ignore.

The report then describes the selection and composition of the team and the arrangement of the itinerary, which started in New York and included visits to Washington, Chicago, Detroit, Cleveland, Buffalo, and Boston. Apart from the official programme, there were opportunities for informal discussions between small groups of team members and their opposite numbers in the building industry in each locality. Many visits were paid to architects' and contractors' offices where details of costs and organization could be examined at leisure, and on several occasions members of the operatives' group were invited to meetings of the local unions or building trades councils. In these informal gatherings, which frequently lasted for many hours, much instructive information was obtained—information which could not appropriately have been given on more official occasions. It may, perhaps, be suggested that, in other itineraries, more time should be allowed for these valuable unofficial contacts and also for the systematic pooling and discussion, during the course of the tour, of the information collected by individual team-members.

The American Building Industry. In this section of the report an account is given of the composition of the industry. On the professional side it is noted that approximately one-tenth of the architectural offices include, as members of the firm, professional engineers of one kind or another. The vast majority of the remainder have more or less permanent working arrangements with firms of structural and mechanical engineers. There are, in addition, several architect-engineer-contractor organizations which undertake both the design and the execution of work. Although few in number, such firms carry out a great deal of work in all parts of the United States and abroad. The position of the contractors differs from that in Britain in that in America there is no differentiation between building and civil engineering contractors. Practically all general contracting firms of standing are organized nationally in the Associated General Contractors of America, Inc. (the A.G.C.), which is divided, for administrative purposes, into a Building Division, a Heavy Construction and Railroad Contractors Division and a Highway Division. There is no difference in status between the members of these sections, which collectively form a single Construction Industry. Employers in the various craft trades (joiners, plasterers, painters, plumbers, etc.), who act usually as subcontractors to a general contractor, are not organized on a national basis, but their local bodies—which in some cities, e.g.,

New York, are affiliated to an organization covering all building trades employers—have considerable importance, particularly in regard to the negotiation of collective agreements on wages and working conditions. In the cities visited the relationship between the various employer bodies was usually most satisfactory. Private enterprise housebuilders are organized separately in the National Association of Homebuilders, which has increased greatly in strength during recent years. On the operatives side, the team understood that regular returns are not required from all employers, and that statistics of the labour employed by building firms are based on sample surveys only, but, according to figures published by the Housing and Home Finance Agency of the U.S. Government, the number of operatives rose from 1,150,000 in 1939 to 2,333,300 in August 1949. This increase in the labour force is generally regarded by American building contractors as one of the two chief factors in the improvement in individual productivity which has taken place during the last two years. The other chief factor is that the first half of 1949 was marked by the virtual disappearance of the widespread shortages of construction materials which had been hampering the building industry since the end of the war. Production of building materials had proceeded at a record-breaking pace throughout 1948, and, by the late months of that year output of most materials appeared adequate to meet all of the then current construction requirements as well as to permit the accumulation of inventories. The disappearance of these shortages was accompanied by a gradually accelerating decline in prices of materials during the opening months of 1949.

The report states that the American building industry can now have reasonable confidence that the supplies of building labour and materials will be adequate for its programme; that its costs, both in respect of labour and materials, are likely to remain reasonably stable, any increase in wage-rates being off-set by economies resulting from the better flow of labour and materials; and that the demand for building work is in these circumstances likely to be maintained or even to increase. Contractors thus feel themselves free to tender without price fluctuation clauses of any kind. All these conditions may be expected further to increase the productivity of the industry, provided that industrial peace can be maintained and, at the same time, undue increases in labour costs avoided.

With regard to unemployment, both sides of the American industry expressed agreement with the view that the state of the labour market had a considerable effect on individual productivity. As the average unemployment benefit for a single man varies, according to State legislation, from $13 to $25 a week, as compared with earnings, when employed, of $100 or more, the incentive to keep a job is considerable. Loss of earnings from seasonal causes is less serious, though far from negligible. Continuous unemployment for several weeks in winter over most of the country is by no means uncommon, even in good years, and the effects on the annual earnings of building workers are considerable. Up-to-date figures were not available, but in Boston the team were given an estimate of 40 full weeks as the amount of employment a craftsman of average ability might now reasonably expect to have in the course of a year.

The team obtained considerable information of the cost of various types of buildings on a foot cube basis and, striking a fair average, it appears that costs in America vary, according to the type of building, from about 55 per cent to 80 per cent above those in Britain. In the districts visited by the team the craftsmen's rate varied from an equivalent of 11s. 10½d. to 16s., and the general labourers' from 6s. 9d. to 9s. an hour. No bonus or other incentive payments were made and the rates therefore represented the actual amounts paid on jobs where the trade union rates applied. The average rate of wages was rather more than four times the standard rate in Britain.

The prices of materials in the United States are not subject to any form of official control; they vary substantially from one area to another, the heavy freight charges being largely responsible for the differences. The team came to the conclusion, on the figures available to it, that the cost of materials in America is slightly higher than in Britain. The team also gathered the impression that the ratio of non-productive to productive labour costs *on the site* is higher in America than in Britain. Nothing was observed by the team which led it to assume that profits made in the American building industry were of a different order from those normally made in Britain.

The Architect's Contribution to Productivity. Under this heading a chapter of the report is devoted to the contribution to productivity that can be made by the architect, and it sets out to show in what respects current British practice can be improved, notwithstanding present conditions. The report states that outwardly American architectural practice appears to be modelled very much on British lines. The American architect's responsibilities towards building owner and contractor are almost identical with those of the British architect. His professional education and training are on similar lines, and so is his code of professional practice. Yet his attitude towards his work appeared to the team to differ in many vital respects from that of many British architects. Without derogating in any way from his duties and functions as an artist, the American architect, if he is to survive in competition, must be a business man as well, compelled by the all-pervading urge to efficiency to concentrate upon the task of ensuring that any building project for which he is responsible shall be a financial as well as an artistic success.

Architects' offices and organizations in the U.S.A. vary considerably in size, and in comparison with Britain a greater proportion of the total volume of work is carried out by the larger firms, which have consequently a more elaborate organization than is general here. The largest architectural organizations, which are, of course, relatively few, may employ a staff of between 300 and 500 persons, and have the following departments:

(i) Architectural design, consisting of definitive sketches, working drawings, scale and full-size details.

(ii) Engineering design, including structural, sanitary, heating, ventilating and electrical engineering.

(iii) Preparation of specifications, both architectural and engineering.

(iv) Business administration.

(v) Supervision of contracts.

In the average-size offices, moreover, the same principles of organization are invariably applicable and the smaller office, with less than 10 employees, aims at maintaining the same standards of efficiency, within the same outline organization.

The architect will frequently be consulted in the course of the financial discussions which necessarily precede the construction of any large building. His preliminary sketches are usually worked out in considerable detail and are accompanied, where appropriate, by models. As the preliminary sketches are usually in the same form as working drawings, they can be speedily completed and transformed into the drawings issued to contractors for the purpose of bidding. By this method the specification writer is also enabled to begin the writing of the specification at an early stage, and the completeness of the preliminary sketches enables the architect's own estimator to arrive at a more definitive estimate than is possible on a simple cube basis. The owner is required formally to accept and approve the preliminary sketches, and is thus made to realize that any later change in his requirements will involve him in delay and additional expense. Approval having been given, the architect proceeds to prepare the working drawings and to invite tenders.

The working drawings for any substantial building are considerably more numerous and more detailed than is customary in Britain. Large-scale constructional details, sufficient for intelligent bidding and for the purpose of correlating all parts of the work, are included in the drawings. In addition, minutely detailed schedules are prepared, and incorporated on the drawings, in respect of doors, windows, fittings and all finishings in order to secure clearer definition of the architect's intention than can be given by drawings and specifications alone, and to relate the drawings to the specification. The drawings are accurately and adequately dimensioned, and nationally-accepted standard symbols are invariably used. They are set out in a definite order and numbered. The sheets being of a standard size, they are normally bound together in the form of a book.

Whenever possible, and certainly in all cases in which a lump-sum bid is required, all the working drawings, specifications and schedules are completed in respect of the work of every trade and specialist service *before tenders are invited*. Sets of the full drawings and specifications, including all

relevant facts from the information supplied by the client to the architect, are issued to each tenderer, who, with full knowledge of the requirements of each trade, can tender more accurately.

It was emphasized to the team in the strongest terms by both architects and contractors that the early supply of complete and detailed information is a fundamental factor in securing speed of construction. The time required by the architect to assemble and prepare the necessary documents is more than made up by the rapid progress the contractor is able to make when the work begins. After the contract is placed it is possible for the site works to be started in a comparatively short time because the contractor has all the necessary information in his possession from the time the tender documents are issued. Certainly the time between the placing of the contract and the start of the work is in general no longer than in Britain.

The American building owner is as anxious as his counterpart in Britain to see his building begun and finished, so that it may become revenue-producing. The American architect has been able to convince him, however, by practical experience, that thoroughness and completeness in the preparatory stages result in savings both in time and in cost. It would be unthinkable in America for a contractor to be instructed to send half-a-dozen labourers to a site to start excavating, at a time when the final designs were no more than half sketched out in the architect's office, merely to satisfy the owner's desire to see work in progress.

Complaints by British contractors of delays in receiving architects' drawings and instructions are so widespread that the superiority of the American procedure can not be emphasized too strongly. It is, moreover, one of the factors which, to a large extent, is in the hands of the architect.

The business-like attitude of the American architect to his profession is reflected in his office administration, which is usually more elaborate than in Britain and is organized to enable the procedure set out in the preceding paragraphs to be followed. In the offices visited, it was apparent that more complete accounts of office and professional costs are kept than is usual in most British offices, and, in general, the exact amount of the architect's costs incurred in respect of each individual contract could be ascertained immediately. The speedy production of the complete drawings, etc., is of course facilitated by the advanced stage to which the preliminary sketches are developed, as mentioned above. All offices have a specification writing branch which is controlled by a partner or senior assistant and the greatest attention is necessarily given to this work. Under the 'design' principal there is usually a 'design chief assistant,' who either controls the preparation of the drawings for the whole scheme or supervises the work of 'design leaders' for the various sections of the job. The printing of specifications and the reproduction of drawings is done better and more expeditiously than in Britain. A method of reproducing pencil drawings so that the reproductions appear as ink drawings capable of multiple repetition (a method known but not generally adopted in Britain) was noted favourably. Drawing-office equipment is generally superior and the filing systems, including the racking of bound sets of drawings and the referencing of catalogues, are also better.

American architects would be appalled by the current British controls, which may require consultation with four or five Government Departments, possibly at both regional and national levels, as well as with a local authority, before any major building project can proceed beyond a tentative stage. The amount of work involved in negotiations with these Departments severely overloads the average British architect's office and distracts him from his primary duties of design and supervision.

The report then deals with methods of contracting, the two most generally employed being the lump-sum contract, usually based on competitive tendering, and the cost contract plus fee or percentage. The standard forms of building contract are agreed between the American Institute of Architects and the Associated General Contractors, and are subject to amendment from time to time in the light of changes in conditions or building practice.

Variations of the work during the progress of the job are discouraged by all parties as a source of delay, annoyance and loss, and are not made to anything like the same extent as in Britain.

An important point for the contractor is that final payments are normally made in America within 30 days of 'practical completion,' a bond being provided to cover the maintenance period, whereas in Britain the period fixed in the contract is usually six months. As there are few variations and as their cost is usually agreed before the work is put in hand, the compilation of the final accounts presents no difficulty. The contractor's capital is thus freed for new projects considerably earlier than is normally the case in Britain, and his dependence upon outside financial accommodation is correspondingly reduced. The amount of office work involved in the preparation of claims is almost entirely eliminated, and the contractor can devote the whole of his organization and his personal attention to his other jobs. In the British system of contracting, based on quantities and with adjustments for the considerable variations which normally occur at present, the calculation of the final payment is bound to be a longer process. It would, however, be of great benefit to the industry if the American practice in respect of final payments could be approached more closely.

There are no clauses in the American Form relating to nominated sub-contractors or suppliers, as they are almost unknown under the American system of contracting. Special artistic work is usually placed as direct contracts.

Tendering Procedure and the Quantities System. Chapter 4 of the report considers the difference between American and British methods of tendering. The preparation of tenders in America on the basis of full working drawings and specifications and the fact that bills of quantities, as known in Britain, are not used constitute differences from British practice which have important effects both on tendering procedure and on the settlement of contracts. In view of the interest taken by American architects and contractors in the quantities system operating in Britain the report discusses some of the relative advantages and disadvantages of the methods adopted in the two countries, in the hope that some lessons of value to both sides of the Atlantic may be drawn therefrom.

It is an essential part of the American system of tendering that drawings and specifications should be complete at the pre-tender stage. Few variations are made after the tender stage and, when changes are necessary, their value is usually agreed or the extra cost accepted before the work is executed. Claims for extras are rare; the goodwill of the employer and architect are of great importance to the contractor and he is frequently prepared to waive any claim he might have, for the sake of maintaining good relations.

The Contractor's Organization. The report notes the speed at which good organization is producing buildings in America. As the contractor is operating in a free and competitive market, and as he is supplied at the earliest possible date with full information of the work to be done, he has both the incentive and the opportunity to organize the constructional work and to carry it out with speed and economy. The complete picture of the whole job, which is normally contained in the working drawings and specifications provided at the tendering stage in America, is an important factor in contract organization. Once the contract is placed the contractor is free to exercise fully his initiative in organization of the work. The amount of work sub-contracted varies from firm to firm, and also on different jobs carried out by the same firm, the sole consideration being the relative advantage to the contractor himself in each case.

The report points out that the nomination by the architect of specialist sub-contractors is rare in the United States. It is important to note, however, that the details of any specialist work have been provided by the architect at the tendering stage, and the orders for them can be placed by the general contractor at the same time as the other sub-contracts. Effective co-ordination and correlation of the work of sub-contractors is one of the most striking features of American contract organization.

The provision by the architect of full details of the work of every trade makes it possible for the sub-contractors to begin work at a much earlier stage than in Britain. Plumbing, electric wiring, heating, staircases, elevators, air-conditioning, and the minor services having all been fully covered in the working drawings, the sub-contractors concerned can come on the job shortly after the steel erection or reinforced concrete frame has been started. The mechanical services are frequently installed on

bare floors, walls and ceilings, sometimes even before the outer walls are built. Chasing and cutting away for pipes, etc., is thus almost entirely avoided, the partitions and walls, etc., being built round them.

A basic fact of the organization of contracts and thus of the speed of construction in America is the availability of almost every material and fitting in the quantity and at the time required. All the war-time controls over materials were withdrawn two years ago and contractors are free to buy competitively and use their knowledge of market trends to the best advantage. If it should happen that material is not delivered on the site as and when needed, alternative supplies can readily be obtained at short notice by a telephone call. This is a salutary remedy for slackness on the part of a supplier. The absence of controls on materials is naturally reflected in the smaller staff required in an American contractor's buying department.

After describing the staff of an American contractor, and pointing out that he does not have to keep a large clerical staff to deal with Government regulations and controls, and with the settlement of contracts, as is necessary in Britain, the report goes on to say that the high cost of labour in America and the relatively low cost of plant in relation to labour costs make it natural that the building industry there should be mechanized to a greater extent than in Britain and that machinery should be employed on various operations which would be more cheaply done here by manual labour. The fact remains, however, that, although many of the machines and tools seen in use during the tour are available in Britain, mechanization is employed much more effectively and more continuously in America. To achieve maximum production, it is vital that British contractors should be persuaded of the advantages of more intensive mechanization and that British operatives should be trained to take care of plant and to use it effectively. Contractors would be persuaded the more easily if the regular supply of materials to the job could be guaranteed. Expensive plant must be continuously in use if it is to be an economic proposition. A description is then given of various mechanized appliances.

Constructional Techniques and the Use of Materials. This chapter in the report begins by saying that constructional methods in America are substantially similar to those in common use here, and few novel forms of constructional technique unknown in Britain were seen. Possibly the plentiful supply of traditional building materials, particularly steel and timber, has reduced the need to explore new constructional techniques to the degree now common in this country. On the other hand, certain factors in the development of the American construction industry have led to economy and simplification in the traditional forms of building.

The American Standards Association have made considerable progress in the development of standards for the building industry, and standardization is playing an ever-increasing part in design and production under three main heads: (1) co-ordination of dimensions of building materials and equipment, (2) performance standards of building materials, and (3) building code requirements.

Modular co-ordination aims at securing efficiency and economy while maintaining flexibility and originality in design. The standard basis in America for modular co-ordination is a three-dimensional grid, uniformly spaced on a 4-in. module. With the effective use of this module, building components may be ordered from stock, and cutting and fitting on the site eliminated. It has been claimed that a saving in cost of 25 per cent could be obtained if all materials used were designed according to the principle of modular co-ordination and if plans were designed on the same basis.

On performance standards the report states that several standards have been completed, but in general this aspect of standardization is not so advanced in America as in Britain. In some localities the restrictive effects of the codes are minimized by using performance standards in preference to specifications. This is welcomed by designers and contractors because a code based on performance is satisfied by any new development which can meet the prescribed tests, whereas codes based on detailed specifications ordinarily prevent the use of new materials or new methods.

Simplification practice, that is, the elimination of superfluous varieties, has made headway in America, and extracts are given from a table published by the National Bureau of Standards in 1942, showing the reduction of types and sizes of certain items following simplification, for instance, roofing slates from 1,260 to 309, and brass taps from 1,114 to 76.

Factory production of the components of buildings is becoming an increasingly important factor in the general economy of the American building industry, and factory-made components are even more widely used in America than in Britain, while the invariable use of central heating and the development of mechanical ventilation have led to the application of simplified planning to almost all types of building. As an essential complement to an adequate system of internal warming, attention is paid to the prevention of loss of heat by constructing properly insulated exterior walls, floors and roofs, and such insulation is always provided, even in the most modest houses. The report then gives detailed notes on construction, such as foundations, frame construction, concrete, shuttering, floors, roofing, items of internal finishings, drainage, water supply, heating and ventilating systems, and electrical and gas work.

Industrial Organization and Labour Relations. Under this heading the report indicates some of the main differences in the methods of handling rates of wages and conditions of employment, although the team feel that no lessons of major importance can be learned therefrom. In the United States, not only does each locality have complete autonomy to determine wages and working conditions, but, in the majority of localities, each craft or section of the industry negotiates independently. The fact that the hourly wage rates of building trade workers, and particularly of the building craftsmen, are among the highest in American industry has an important bearing on recruitment and on productivity.

In addition to stimulating the recruitment of youths to the crafts, the high craft rate of wages has the effect of compelling those responsible for design to reduce the extent of craft operations as much as possible and, on some types of work, to eliminate some of them completely. It also obliges the contractor to ensure that his craftsmen are, to the maximum extent possible, profitably and usefully employed. Mechanization is accordingly encouraged, and every method is adopted to ensure that craftsmen have their materials readily at hand at the actual working position.

In comparing American and British wages, it should be noted that the American hourly rate is not supplemented by the large number of extra payments and allowances prescribed in British collective agreements. There are no provisions for payment for annual or public holidays, for time lost owing to inclement weather or for the supply or maintenance of tools. Travelling time may be payable under certain conditions, but, in general, only when the circumstances are exceptional. The operative knows that, from his high hourly rate, he must make provision for possible unemployment and for any incidental losses or expenditure which may be incurred. The system of payments by results is not accepted by the unions and is unknown in contracting, although it may apply in housebuilding, especially in the less organized areas. The calculation of the amount of the weekly pay-packet is thus a much simpler matter than in Britain, and the work of contractors' site and head-office staffs is considerably lightened.

Labour Productivity and Recruitment. Bearing in mind the estimated difference of 50 per cent in production per man-hour in favour of America, the report sets out to consider the reasons for this difference, of which a large part can be accounted for only by the individual attitude towards work, an attitude which reflects the general pattern of American industrial life. There, the worker is actuated by the same impulse which moves every other member of society there, believing that only by hard work can he obtain the maximum financial benefit for himself. He has never acquired the habit of doing less than he is capable of doing. The whole American way of life is a challenge to the individual to give of his best in order to maintain and improve his standard of living and thus avoid the industrial and social scrap-heap which is reserved for failure.

Having secured employment in an industry that offers a high standard of living, the worker is prepared to make a real effort to retain it. He thus develops keen 'productivity consciousness,' realizing that the retention of his position depends to a large extent upon the contribution he is willing

to make and upon his ability to maintain the speed and the quality of workmanship which the organization of the job demands. He is aware also of the existence of a pool of unemployed building trade operatives from which, in the event of his being unable to keep up the required effort, others can readily be found to replace him. Unemployment causes a more serious reduction in the operative's standard of living in America than in Britain because of the considerably greater difference between average earnings and unemployment benefit. And, as almost every article of household equipment can be, and very often is, obtained on the hire-purchase system and would be lost if the instalments were not maintained, the influence of the wives should not be under-estimated.

These positive and negative inducements are not, of course, the complete answer to the question of productivity. In Britain the policy of full employment is accepted by all political parties and efforts are being made to eradicate large-scale unemployment. However, desirable as it is to reduce the human suffering caused by unemployment, experience of the post-war period shows that, unless the fear motive arising from unemployment can be replaced by some effective positive incentive, discipline at all levels weakens and the effect on productivity is serious. The British building industry is attempting to supply this incentive by the adoption of schemes of payment by results, a method which the American building industry does not favour.

Housing. The total number of housing units begun from the end of the war to the end of 1949 approached 3,500,000, compared with approximately 800,000 in Britain, and the rate of production is now over 1,000,000 a year. The average time taken to complete a housing unit has been halved since 1946, and is now back to the pre-war time of three and a half to four months.

It is part of the American tradition that housebuilding is essentially a function of private enterprise; that is, housing initiated and financed by private resources either for direct sale or, as an investment, for letting. The report quotes the following passage from the preamble to the Housing Act passed by Congress in July 1949:—'The policy to be followed in attaining the national housing objective shall be: (1) private enterprise shall be encouraged to serve as large a part of the total need as it can; (2) governmental assistance shall be utilized where feasible to enable private enterprise to serve more of the total need.'

Public housing is undertaken by local housing authorities appointed by the municipalities, which may be regarded as semi-independent organizations in that, so long as they do not fall into financial difficulties, they are not subject to direct control by the municipality, but, as the tenth annual report of the New York Housing Authority says—'A fundamental tenet of public housing is to avoid competition with private enterprise.'

Conclusions and Recommendations. Chapter 10 of the report contains the conclusions reached by the team and the recommendations put forward by it. In view of the importance of this chapter it is here given in full.

1. 'The great speed of American constructional jobs and their low cost—in relation to the average rate of wages—must make an extremely strong impression upon any observer, and in this Report we have examined the main psychological, organizational and technical differences between the British and American building industries with the object of isolating the factors which make for high productivity in the United States. In our opinion, the most important, but not the only, factors are (i) the complete pre-planning of the job by building owner, architect and contractor, (ii) the proper co-ordination of sub-contractors' work and the effective collaboration between them and the general contractor, (iii) the adequacy of supplies of labour and materials and the absence of restricting controls, (iv) the general availability and use of mechanical aids, (v) the recognition of the importance of continuous research into the production of materials and into building techniques and (vi) the nation-wide stimulus of the American industrial climate, which has a great effect on the output of every individual, and which is shared by all members of the building industry.

2. 'This last reason, which may be termed the psychological factor, is perhaps the most important of all. Acceptance of the need for high productivity as an essential factor in industrial life is universal in America, and it permeates the will and action of the operatives as well as of the professional and employer groups. The attitude of the individual towards his work must, in an industry like building, which depends so much on individual effort, be vital. At the same time, consciousness of forming part of a well-organized team moving at high speed, has a definite effect upon productivity. There appears to be a real community of interest between all sections of the industry based on a realization of their inter-dependence. Competition exists in full measure, but, once a job is started, the spirit of collaboration, inspired by the driving force of the general contractor, can be relied upon to secure the desired results.

3. 'Apart from the adequacy of supplies of materials, all the influences towards higher productivity mentioned above can be developed in the British building industry by its own efforts. We believe that the prosperity and efficiency of the industry can be increased, its costs lowered and the earnings of its operatives raised, if the responsible industrial organizations, the Government departments concerned, individual building owners (private and public) and, above all, the individual members of the industry give due consideration to the picture which we have drawn and if all strive to give effect to the recommendations we now make. Each one in his *individual capacity* must simultaneously make the necessary effort—architects, to plan better; contractors, to organize better; sub-contractors, to co-operate better; and operatives, to produce more.

4. 'Proper pre-planning being such a determining factor, the attention of all building owners and the architectural profession must be drawn to the importance of the following guiding principles:

'(*a*) the establishment of full confidence between architect and client on a business basis and the definite settlement at an early stage of the client's requirements—the latter being particularly necessary in the case of Government departments—so that costly and time-wasting variations in the work are eliminated and the speedier final settlement of accounts facilitated;

'(*b*) the preparation of designs which have regard to ease of construction and saving of cost by the avoidance of unnecessary cutting to waste, chasing, etc., and are based, as far as possible, on standard dimensions. Designs must take into account also the types of materials and equipment available.

'(*c*) the completion, before the tender stage, of all essential working drawings, specifications and schedules, and the issue to tenderers of such drawings and other details as are necessary to enable them to price the job quickly and accurately;

'(*d*) the issue to the main contractor of all information necessary for letting sub-contracts—nominated or otherwise—and for the placing of orders with nominated suppliers immediately upon the acceptance of his tender. Any separate contracts let direct by the architect should be entered into at this stage;

'(*e*) the more careful selection and the better training and payment of clerks of works.

5. 'The attention of the general contractor, and of all others concerned, is drawn to the following recommendations, aimed at the improvement of contract organization:

'(*a*) constructional work should not be started until the organization of the job has been worked out to the most advanced stage possible. Architect and contractor should therefore combine to resist pressure, whether from the building owner or from the licensing authorities, to begin operations on the site prematurely;

'(*b*) the general contractor should regard the proper co-ordination of the sub-contractors as one of the most important of his functions and this depends to a large extent on the early settlement of all details of the works and of the placing of all sub-contracts, as recommended in para. 4 above;

'(*c*) general and positive use should be made of simplified time and progress schedules, which should be circulated widely throughout the job and to which all sub-contractors and any direct contractors should be required to conform exactly;

'(*d*) the work of sub-contractors responsible for the services should be started at an early stage and their fittings, etc., installed conformably with the progress of the constructional work—bearing in mind that American practice in this respect is made possible because great care is taken by contractor and sub-contractors and by their employees to preserve from damage all work placed in position;

'(*e*) a review should be made of existing facilities and schemes for the selection and

training of supervisory staff with the object of promoting a quick increase in the intake of technically trained supervisors with good general educational standards;

'(*f*) the use of costing systems appropriate to the type of work undertaken, avoiding all unnecessary elaboration;

'(*g*) the encouragement of the maximum economic use of mechanical aids of all descriptions, and the wider spreading of information appraising the merits of machinery and plant available.

6. 'With regard to the use of materials, it is not necessary to emphasize the increased efficiency and economy which can be secured by adequate supplies of timber at a reasonable price. The use of unsuitable timber and substitute materials substantially increases the cost of British building.

7. 'Dealing with concrete and cement products, it is recommended that

'(*a*) the whole question of the quality control of concrete be examined and, in particular, its specification by performance and quality, i.e., by compressive strength in lbs. per square inch, instead of by volume or weight;

'(*b*) investigation be made into the technical possibilities of the use of transit-mixed concrete in the major centres;

'(*c*) investigation be made into the advantages to be gained from greater use of air-entrained concrete;

'(*d*) more general use of concrete blocks of various suitable aggregates be encouraged for all appropriate purposes.

8. 'The desirability of further investigation into American building materials prompts the suggestion that certain of the industries manufacturing materials for the building industry in Britain should consider sending teams to the United States. Particular attention should be given to the co-ordination of dimensions in the production of American building components.

9. 'The installation of the services in American buildings has reached a high degree of efficiency. Much valuable guidance would, for example, be secured from a further and more detailed study of American plumbing practice, with particular reference to the simplification of planning and fittings. The general adoption of central heating in small houses and flats leads to considerable economies in planning and in building maintenance costs.

10. 'The responsible Government departments can assist productivity in the industry in the following ways:

'(*a*) Departments responsible for licensing and for materials and other controls should continually keep under review the possibility of relaxing or eliminating them so as to facilitate development and reduce unproductive paper-work. The phasing of materials orders is in any case a delicate operation and job organization may be ruined by official requirements that certain materials are not to be delivered until the end of a particular licensing period.

'(*b*) Removal of controls over the prices of basic building materials with a view to their eventual stabilization. If stabilization of prices could be substantially achieved, the way would be open for the withdrawal of fluctuations clauses in contracts and a return to competitive purchasing of materials.

'(*c*) The restrictive effect of obsolete bye-laws on the use of new materials and methods would be eased by the adoption of simpler and quicker procedure for revision and unification. Many features of American plumbing practice, for example, would not conform to the majority of current British bye-laws.

'(*d*) Improvement of the allowance of energy-giving foods for the building trade operative, and, in particular, the provision of suitable fillings for sandwiches to workers unable to reach proper canteens.

'(*e*) Propaganda to inculcate safety-mindedness among building trade workers can do much to reduce the number of accidents, and, in this connection, a further examination of American requirements and practice in regard to scaffolding might result in agreement on some appropriate modifications of the Building (Safety, Health and Welfare) Regulations to permit the use of simplified and more economical forms of scaffolding.

11. 'In regard to housing by private enterprise, both for sale and for letting, the results achieved in the United States since 1945 confirm pre-war experience in Britain that the highly competitive nature of the market for such houses results in high productivity and continually lower costs. Freed from all controls, the American housebuilding industry can provide houses for a large proportion of the population at prices commensurate with their average annual family incomes. The responsible authorities are urged to take all possible steps to make available to the industry adequate supplies of essential materials, particularly timber, and to ease or remove the existing onerous restrictions on private enterprise housebuilding, for sale and rental.

12. 'Building owner, architect, quantity surveyor, contractor and sub-contractors should all co-operate nore closely to reduce building costs. In particular, each should do his part in carrying out without delay the procedure laid down in the Form of Contract for the certification of work done and the settlement of intermediate and final accounts in order to reduce the heavy financial burden imposed on the industry by present practice. Consideration might also be given to the introduction of the American practice of making final payment within 30 days of completion of work on the security of a contract guarantee bond.

13. 'Consideration should be given to the simplification of the Standard Method of Measurement.

14. 'The efforts made to stimulate recruitment to the American building industry appear to have had a considerable measure of success. In any comparison with the apprenticeship system in Britain the following points are worthy of examination:

'(*a*) the considerable range in the permitted age of entry into apprenticeship, usually between 17 and 25 years;

'(*b*) the varying length of apprenticeship in the different trades, the average period being under four years;

'(*c*) whereas standards of training are nationally prescribed, the Local Joint Apprenticeship Committees retain complete responsibility for recruitment and technical training.

15. 'Finally, it is necessary to emphasize the vital part which the individual operative and his union officers must play in the struggle for increasingly higher productivity and progressive reduction in costs. When architect, contractor, sub-contractor, materials manufacturer and supplier, local authority and Government department have all made their essential contribution to maximum site efficiency, the ultimate responsibility for production must still rest on the individual operative on the job. The fact that output in the building industry is so much higher in America than in Britain is not due only to the better organization which has been developed and the natural advantages that are enjoyed. It depends, too, to a great extent, upon the keenness and initiative of the individual workman, who is proud to be a member of the building industry and anxious by his efforts to maintain the status in society and the standard of living he derives from it. He takes an interest in the job as a whole, and not merely in his own particular operation, and co-operates wholeheartedly with his employer and with the other workmen. Changes in site organization, where these are necessary to raise output, are readily accepted, and he willingly assists in the development of new methods and techniques.

16. 'The high standard of living enjoyed by the American building worker depends entirely upon the efficiency and productivity of the industry. The individual workman knows that his place in the industry can only be maintained by his personal productivity and efficiency, just as high wage rates in the industry can only be sustained by collective efficiency. Here, too, the British operative must realize that his standard of living is just as closely linked to the efficiency of the industry and depends upon the personal contribution he is prepared to make towards it. Present living standards, low as they are compared with those in America, are in danger unless each and every member of the industry plays his part in eliminating waste of effort, improving organization, and building up a high rate of productivity. Whether Marshall Aid is continued or not, failure to increase the present rate of production in the British building industry, in common with all other industries, is likely to result in a series of industrial and economic crises with the overshadowing danger of large scale unemployment and its grim consequences.

17. 'American experience confirms, indeed emphasizes, the inter-dependence of all sections of the industry and the need for a closer partnership between them in the real sense, expressed in greater individual effort as part of a team. Even if architects plan better, contractors organize better, subcontractors co-operate better, and opera-

tives produce more, the maximum efficiency will not be secured unless each, in his individual capacity, makes the necessary effort simultaneously and co-operatively.

18. 'It is possible in this concluding chapter to indicate only a few of the more striking aspects of American building practice. The outstanding lesson to be learned is, in our view, that the British building industry must be mobilized to eliminate everything which stands in the way of greater efficiency —be it inadequate preparation of work, bad organization by architect or contractor, or the continuance of unnecessary or restrictive controls or practices—so that each member of the industry can, in his own sphere, perform the best work of which he is capable. The Report as a whole must be studied in detail by all engaged in the industry. The greater the interest that can be stimulated, the greater is the likelihood that some real advances may be made. Discussion, unless followed by action, is not sufficient. The professional bodies and the national organizations of the industry, both at the highest level and in their branches throughout the country, should set up machinery to inquire into their individual and collective contributions to productivity and the ways in which these can best be combined in the national interest.'

Appendices. There are nine appendices attached to the report: A. Average overall cost of certain types of building in U.S.A.; B. Average unit prices, including overhead costs and profit; C. Range of some materials prices (delivered) in U.S.A.; D. Massachusetts Institute of Technology; Course in building engineering and construction; E.. American and British time and wages sheets; F. The Lunt Lake Apartments, Chicago; G. Basement and non-basement type house; H. Small homes council of the University of Illinois; and I. Wage rates per hour for building trades in Chicago and Cook County, 1949-50.

The report is illustrated, and may be obtained from the Anglo-American Council on Productivity, 21 Tothill Street, London, S.W.1, price 2s. 6d.

Practice Notes

Edited by Charles Woodward [*A*]

Central Land Board (Forms). Asked how many Forms L.39 have been sent to owners of property by the Central Land Board; how many have been withdrawn; why they were sent and why withdrawn; the Minister of Town and Country Planning replied: One hundred thousand and eighty-three, of which less than 300, sent in error, were withdrawn. The forms were sent to owners of single dwelling houses to ascertain whether their claims to compensation were admissible. Asked whether he was aware that it required a new form—R6/82—to withdraw these forms, would he agree that the issue of these forms caused a number of claimants to answer questions which were optional under Form S.1, and in the circumstances would he give an assurance that the information which they gave would not be used to their disadvantage? The Minister replied: No information is ever used to anybody's disadvantage in this field. The percentage affected is remarkably small—less than 300 out of 100,083—and will surprise the hon. Member by its smallness. It is less than one-third of 1 per cent. Asked whether he realized that there was great indignation about these forms and that many people felt that they were now being compelled to make a valuation which they chose not to make in Form S.1 and thereby forfeited the contribution for their professional fees, the Minister replied: I have no evidence of that. (18 April 1950.)

Development Charge. Asked why, when the development charges to be paid on houses built on one of Stafford's municipal housing estates are £18 per house, the development charges on houses of almost similar size and construction built by private enterprise ran sometimes as high as £210, the Minister of Town and Country Planning replied: The value of a piece of land, with permission to build a house on it, naturally varies with the situation of the plot and the expenditure necessary on the site, but if the hon. Member will let me have details about the Stafford sites, I will ask the Central Land Board for a report.

Asked what procedure should be adopted by any person who feels he has a grievance against the operation of the development charge, the Minister replied: They should communicate with their Member of Parliament. (18 April 1950.)

New Towns (Land Acquisition). Asked whether he would use his powers to permit persons whose freehold land and property are acquired by new town development corporations to be given an equivalent freehold plot in exchange and compensation sufficient to replace their property; and if, in view of the declared policy of ultimately taking over all freeholds in the area designated for the new town of Basildon and the dissatisfaction which this is causing, he will leave in possession of their freehold rights all freeholders whose land and buildings will remain unaffected by the development of that town, the Minister of Town and Country Planning replied: I have already reaffirmed my predecessor's promise not to acquire property at Basildon before it is needed for actual development, but, where acquisition takes place, I can not undertake to provide an equivalent freehold plot in exchange.

Asked whether he would consider using his special powers under the Act to safeguard freehold rights in the area designated, the Minister replied: I think the freehold rights are completely safeguarded until the time comes for actual development by the undertaking to which I have referred. This area, I must assure the hon. Member, is more in need of decent planning, cleaning up and bringing up-to-date than any other area to which we are bringing a new town.

Asked whether he was aware that it is no more satisfaction to a man to be told he will be robbed in 10 years than to be told he will be robbed tomorrow, the Minister made no reply. (18 April 1950.)

Advertisement Hoarding, Pinner. Asked if he was aware that both the Middlesex County Council and the Harrow Urban District Council have unanimously protested against permission being granted for the erection of an advertisement hoarding at the corner of Bridge Street and Chapel Lane, Pinner, on the grounds that it constitutes both an eyesore and a danger to traffic, and if he will now reconsider his decision, the Minister of Town and Country Planning replied: I have received no official protest from either of the local authorities about this, but it is always open to them to submit for my confirmation a draft order requiring a discontinuance of the use of the site for advertising. I would consider such an order in the light of any fresh evidence they can produce. (18 April 1950.)

Building Licences. Asked whether he would allow any unused number of a quota of building licences in an urban area to be reallocated to a rural area, so that aged couples might retire to the latter districts, the Minister of Health replied: If a local authority, out of its allocation, wishes to make such an arrangement with another, I am ready to agree. (18 April 1950.)

Building Plots (Development Charge). Asked if, in view of the restriction that has been applied to private building, he would extend the period beyond 1952 for those people who purchased plots before 1 July 1947, who are prevented solely by the restriction in the building programme from building their houses, the Chancellor of the Exchequer replied: I presume that the hon. Member is referring to the arrangements under which certain owners of building plots, if they begin to build a house before 1 January 1953, may set off development charge against a claim made on the £300 million to be distributed under the Town and Country Planning Act 1947. Since every case of this kind involves a commitment on the £300 million and that sum has to be distributed before 1 July 1953, I regret that any further extension of these arrangements is impossible for practical reasons. (25 April 1950.)

Land Development. Asked if he would consider including under section 80 of the Town and Country Planning Act 1947 all land, the owners of which had installed before 7 January 1947 all necessary roads, sewers and other services with the object of ensuring proper and balanced development, the Minister of Town and Country Planning replied: No. (25 April 1950.)

MINISTRY OF TOWN AND COUNTRY PLANNING. The Minister of Town and Country Planning has issued new regulations simplifying the procedure for making

tree preservation orders. It will no longer be necessary to include maps with every tree preservation order sent to owners affected. Instead, local authorities may refer to a map deposited at a convenient place.

In the case of individual trees and groups of trees, local authorities need no longer send copies of the actual orders to owners and occupiers of land concerned, but they must indicate the main effects of these orders in notices served and ensure that the orders themselves are open to inspection. Copies of orders must still, however be served in the case of woodlands. (11 April 1950, No. 5.)

The Regulations are: The Town and Country Planning (Tree Preservation Order) Regulations 1950, No. 534, and came into operation on 6 April. The Regulations S.I 1948, No. 1436, are revoked by the new Regulations. Circular No. 85 dated 30 March 1950 has been issued by the Ministry and explains the purpose of the revised Regulations.

Kent County Council has asked the Minister to confirm an order designed to preserve substantial areas of parkland trees and other woodlands at Wilderness Estate, Seal, near Sevenoaks, and to ensure as far as possible that the woodlands are managed in a manner which would preserve the amenities of the locality, and, in particular, ensure that felling is controlled and that replanting shall take place.

Conversion of two flats to single residence. In an appeal to the Minister under section 17 of the Town and Country Planning Act 1947, he decided that the use as a single dwelling-house of the one building, previously used as two separate dwelling-houses (flats) and the carrying out of works which affect only the interior of the building, do not constitute development of land within the meaning of the Act, and that therefore planning permission was not required for the proposals. (THE ESTATES GAZETTE, 22 April 1950.)

MINISTRY OF HEALTH. Circular 48/50, dated 17 April 1950, points out that under section 43 of the Housing Act, 1949, the sale of a building converted under a building licence into a house or houses and the letting of houses as provided, are subject to control under section 7 of the Building Materials and Housing Act, 1945, as amended by section 43 of the 1949 Act, in the same way as the sale or letting of new houses constructed under a building licence. This provision was inserted in the 1949 Act so that those undertaking works of conversion could know before starting them what return they might expect by way of rent of the houses or flats formed by conversion. In consultation with the Minister of Works it has been decided that, in future, licences authorizing the conversion of any buildings into houses or flats should be issued subject to a condition fixing the maximum rent at which the dwellings to be provided may be let and, where justified by the licensee's interest in the property, to a maximum selling price. A rental fixed in this way is taken outside the scope of review by a Rent Tribunal by subsection 7(*b*) of the Landlord and Tenant (Rent Control) Act, 1949.

As the work of conversion varies according to the type of property and the area, it must be left to the local authority to decide what is, in their judgment, a reasonable rent and selling price for the property having regard to all the circumstances, including the cost of conversion and repair and any development charge, and to prevailing rents of comparable properties in the neighbourhood.

The form of condition set out in Circular 50/46, paragraph 6, suitably adapted, should be used. The Minister would take this opportunity of reminding authorities that any other condition purporting to control or restrict the freedom of letting or sale of property constructed or converted under licence may prove to be unenforceable either under the Acts or the Defence Regulations.

Local authorities will also be aware that section 43(4) of the Housing Act 1949 provides that where some but not all of the work of constructing a house or converting a building is done under licence, the construction or conversion shall be deemed for the purposes of control to take place under the authority of the licence.

R.I.B.A. STANDARD FORM OF BUILDING CONTRACT. The R.I.C.S. April Journal contains the following note:

'Cash discounts for Nominated Suppliers. Difficulties have arisen in the interpretation of Clauses 22 and 24 of the R.I.B.A. Form of Contract adopted for the use of local authorities. If the contractor does not exercise his rights under the last paragraph of Clause 22(*b*) and refuses to order materials or goods from a nominated supplier who does not agree to allow a 5 per cent discount for cash, some local authorities take the view that there is no legal obligation on the employer to reimburse the contractor for the loss of discount. Quantity Surveyors are advised to obtain the authority of all their clients before making any allowance for loss of discount.'

It will be remembered that clause 22 states that the p.c. sums are 'deemed to include' 5 per cent cash discount. It would therefore appear that the point referred to by the R.I.C.S. would not arise if the nominated suppliers were instructed to include the cash discount when giving quotations to the architect for the purpose of insertion in the Bills of Quantities.

MINISTRY OF WORKS. The Minister of Works has authorized a rise of 8 per cent in the current maximum selling prices of Asbestos Cement products manufactured both by Turners' Asbestos Cement Co., Ltd., and Tunnel Asbestos Cement Co., Ltd. The change operates from 11 April 1950. (M.O.W./34/50. P.I.295.)

LAW CASES. In a dispute concerning the basis on which compensation should be paid under section 2(1)(*b*) of the Compensation (Defence) Act, 1939, in respect of making good damage which occurred during the period (five years), the property was under requisition by the Minister of Works, the General Claim Tribunal was asked to determine the following preliminary point:

When damage occurring during requisition can be made good only by repair including decoration, has any deduction to be made from the cost of such repair in assessing compensation under section 2(1)(*b*) of the Compensation (Defence) Act 1939, if the item in question was not in a perfect state of repair at the commencement of the requisition?

The Tribunal answered the question in the negative. (THE ESTATES GAZETTE, 1 April, 1950.)

Vacational Work for Students

The following notice, published in the technical journals, has so far achieved a negligible response. Members are asked to give it serious consideration.

With the approach of the Summer vacation, the R.I.B.A. is beginning to receive enquiries from students at the schools of architecture for the names of architects who may be willing to take them into their offices for the summer months to gain practical experience. Anxious to continue the arrangements which it has made in the past to help these students, the Royal Institute is once again asking for the names of architects who are in a position to offer vacational work during the period June to September inclusive. The R.I.B.A. will keep a register of these names and another of the students, and try to meet the requirements of both.

There is no fixed scale of remuneration for these 'student assistants', but it is suggested that a salary should be paid in all cases, adjusting it individually to the stage of training reached by the student and his or her previous office experience. The Institute will be glad to advise employers and students in this matter.

For the past three years the number of architects helping to operate this scheme has been inadequate to the number of students seeking work in the holidays. The R.I.B.A. hopes that this year the response from members will be greater—at least sufficient to meet the demand. Will all members, therefore, who are willing to employ these students, please write to the Secretary, R.I.B.A., stating the number of students they can employ at any one time, and the remuneration they are prepared to offer.

Students wanting work in the vacation should also send their names to the Secretary, R.I.B.A., stating what year in their course they have reached, the locality in which they are prepared to work, and the remuneration they expect.

Architects' Benevolent Society

Annual General Meeting

THE ARCHITECTS' BENEVOLENT SOCIETY held its Annual General Meeting in the rooms of the R.I.B.A. on 3 May. Mr. A. Graham Henderson, A.R.S.A. [*F*], President-elect of the R.I.B.A. was elected President of the Council of the A.B.S. for the year 1950-51.

The 100th Annual Report was adopted by the Council. Mr. Charles Woodward [*A*] presided at the meeting in the unavoidable absence of the President, Mr. Michael Waterhouse, M.C., and in moving the adoption of the Report, said:

'The Report on the Society's work during 1949 shows that good progress has been made in enlisting the interest of members of the profession, and encouraging subscriptions to the funds. This has enabled the Council to be more generous in its help to those who apply for it. In several cases this has just made all the difference, and in one particular case—that of a young man suffering from tuberculosis—the Society's grant enabled him to have the early treatment which meant recovery, and he is now able to work again. It is pleasant to record that out of his first month's salary he sent a contribution to the Society.

The organizers of the Building Exhibition—Mr. Greville Montgomery and Mr. and Mrs. Hugh Montgomery—again came to our assistance with their very great generosity in providing a Stand at the Exhibition to run a Tombola, and also by their 'gate-money' donation for the special admission tickets. The high-light of the Exhibition was the visit of Her Majesty the Queen, who graciously bought a ticket in the Tombola.

Over a thousand pounds was raised as a result of the Tombola and the donations from the Montgomery family, and we are indeed grateful to them for their practical help. Later in this meeting we propose to express our gratitude by electing Mr. Hugh Montgomery a Vice-President of the Society —the only honour we are able to confer, and one which was given to Mr. Greville Montgomery in 1939.

The Society's financial position is, on the whole, satisfactory, the revenue from subscriptions, insurance commission, and advertisements in the 'Red Book' being noticeably increased, and a good response having been received to the Christmas 'Half-Crown' appeal. The Council have been able to place over £700 towards the special Reserve Fund.

During the coming autumn, we hope to raise further sums by functions in celebration of the Society's Centenary—in particular by a Ball on November 17th, and I hope that the members of the profession will support us generously in this endeavour.'

Mr. H. S. Goodhart-Rendel was re-elected Hon. Treasurer and Mr. Charles Woodward was re-elected Honorary Secretary.

Officers and Council for the Year 1950-51

President: President, R.I.B.A.

Vice-Presidents; Sir Harry Vanderpant, Barrister-at-Law [*Hon. A*]; Sir Banister (Flight) Fletcher, D.Litt., F.S.A., F.S.I. [*F*]; Mr. H. Greville Montgomery [*Hon. A*]; Mr. H. S. Goodhart-Rendel [*F*]; Mr. W. H. Ansell, M.C. [*F*]; Sir Lancelot H. Keay, K.B.E. [*F*]; Mr. Hugh R. G. Montgomery, M.C. [*Hon. A*].

Members of Council: Mr. Anthony Minoprio [*F*]; Mr. J. Alan Slater [*F*]; Mr. L. Sylvester Sullivan [*F*]; Mr. Maxwell Ayrton [*F*]; Mr. R. O. Foster [*A*]; Dr. C. H. Holden [*F*]; Mr. A. L. Roberts [*F*]; Mr. A. E. Wiseman [*F*]; Mr. P. V. Burnett [*F*]; Mr. R. E. Enthoven [*F*]; Mr. I. Murray Leslie, J.P. [*Hon. A*]; Mr. Howard Lobb [*F*]; Mr. Digby L. Solomon [*F*]; Mr. Francis Jones [*F*] (Manchester Society of Architects); Mr. Ernest Bird [*F*] (Hants and I.O.W. Architectural Association); Mr. R. A. Cornell [*L*] (Essex, Cambridge and Herts Society of Architects); Mr. A. W. Pipe [*L*] (West Essex Chapter, Essex, Cambridge and Herts Society of Architects); Mr. B. M. Ward [*F*] (Liverpool Architectural Society); Mr. Cecil Burns [*F*] (South-Eastern Society of Architects); Mr. N. R. Paxton [*F*] (West Yorkshire Society of Architects); Mr. H. V. de Courcy Hague [*F*] (Devon and Cornwall Architectural Society); Mr. H. Carr [*F*] (County Architects Society); Mr. J. R. Leathart [*F*] (Architectural Association); Mr. W. H. Scanlan (Institute of Registered Architects); Mr. C. H. Taylor (Incorporated Association of Architects and Surveyors); Mr. E. Hadden Parkes [*F*] (Mount Pleasant Artists' Rest Home); Mr. H. B. S. Gibbs [*F*] (Sheffield, South Yorkshire and District Society of Architects); a Representative of Architectural Students.

The Year's Work: Although the applications for help had not decreased in the ninety-ninth year's work, the Society had begun to build up a reserve to enable it to look to the future welfare of its beneficiaries in this, the centenary year.

Pensions and Grants: One hundred and two cases were helped during the year, fifteen of which were applying for the first time. Twenty-eight were architects or architects' assistants, fifty-seven widows and seventeen were applying on behalf of orphans. One pensioner died during the year and the vacancy was filled by an architect aged 72 and nearly blind. A small Christmas gift was sent to each of the Society's pensioners and regular beneficiaries, and was greatly appreciated. Food parcels from Australia were again received and distributed. A presentation to Christ's Hospital was obtained for the daughter of an architect and she is reported to be making good progress in the school.

Finance: Subscriptions came in better than in 1948, and the receipts from Collecting Boxes also showed an increase. Ordinary donations received were less. The income from investments showed a larger total owing to the receipt of two years' refund of income tax. Legacies totalling £172 15*s.* 6*d.* were received during the year under the wills of Mr. J. Bradshaw Gass (instalment, £72 15*s.* 9*d.*), Mr. G. C. Horsley (£50), and Mr. A. G. Morrice (instalment, £49 19*s.* 9*d.*).

Advertisements: Once again the revenue from the advertisement pages in the Society's 'Red Book' is increased, providing a very substantial help to the Society's funds. The Council offers its best thanks to all the advertisers who have contributed to this excellent total.

Insurance: The commission received under the Insurance Scheme shows another large increase, and totals over seventeen hundred pounds for the year. This sum, which represents commission received on policies taken out through the Society's Agency, is recorded as donations from the policy-holders, and is used for the Society's work in the relief of distress among members of the architectural profession. The Council is grateful to all those who place their insurances through this agency, and would like to urge more architects to adopt this means of safeguarding themselves by insurance and at the same time helping the Society.

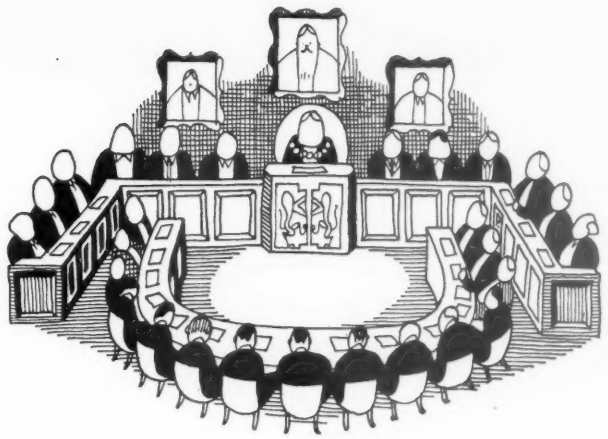
The Council would like to record its thanks to the Technical Press, including THE ARCHITECT AND BUILDING NEWS, THE ARCHITECTURAL ASSOCIATION JOURNAL, THE BUILDER, BUILDING, THE INSTITUTE OF REGISTERED ARCHITECTS' JOURNAL, THE OFFICIAL ARCHITECT, and the R.I.B.A. JOURNAL for so kindly giving space to the Society during the year, both in connection with advertising and also for its appeals and other activities. The publicity thus given is most valuable and appreciated.

Vote of Thanks: The Council thanks the R.I.B.A. for the use of office accommodation and committee rooms, for its generous annual grant, and the Secretary and Staff for courteous help on all occasions, of inestimable value to the Society.

In conclusion, the Council thanks all contributors to the Society for making its work possible, and hopes they will continue their support in the future. There are many ways in which the Society could help those who appeal to it in their need, but until it is supported more generously by the profession it can not help as much as it would like. As the Society embarks on its hundredth year of charitable work the Council hopes that all present subscribers will try to bring in other contributors, until all members of the profession are supporting their own benevolent Society.

Institute Affairs:

For Members Only



THIS IS THE SECOND INSTALMENT of a new JOURNAL feature to give members more information about the activities of the Council and Committees than is contained in the usual formal announcements. This feature is not a substitute for 'Notes from the Minutes of the Council' but a commentary on and an explanation of current activities which is being prepared by a group of committee members, one in each committee. Periodically they will submit notes on what their committees are doing so that the Editor can co-ordinate the notes for publication in alternate months during the session.

The Working Party and the Productivity Team. Since we published the first instalment of this series, two important documents have been published affecting the practice of architecture. These are the report of the Working Party on the Building Industry, and the report of the Productivity Team on Building, following their visit to the U.S. Both reports are summarized at some length in this JOURNAL, and both events, in particular the Working Party, have been serious preoccupations of the building industry representative bodies for several months past.

The professional bodies were represented by Assessors on the Working Party and not by full members. There were at first some fears that because of this, recommendations might be made which would affect the activities of the professions without their having direct power to influence them. Many persons feared that the appointment of the Working Party might lead to experimental tinkering with a carefully built-up and delicately balanced system of building operations and even, eventually, to some form of nationalization. All these fears have proved groundless; the Working Party has accepted the present system, and its recommendations are clearly intended to effect various improvements, aimed principally at higher efficiency, greater output and lower costs. The recommendations put forward by the Royal Institute in its evidence have been virtually accepted completely.

Points in the R.I.B.A. evidence that have been endorsed are: the need for adequate time for pre-planning of building schemes; the general adoption of the R.I.B.A. Form of Contract by government departments, local authorities and other bodies; the need for a more efficient system of licensing; the importance of time and progress schedules and of regular site meetings in larger contracts; the need for closer liaison between research and building.

The R.I.B.A. evidence also contained a statement on the duties of the architect as envisaged by the R.I.B.A.; it was felt that this required making in view of the fact that the architect 'is often thought of merely as a decorator, who can improve the appearance of a building, almost as an afterthought'. It is clear that the Working Party has accepted the point of view of the architect's duties as set out by the R.I.B.A.

The President's inaugural address and the Team's preliminary announcement, published in earlier JOURNALS, gave a general idea of the findings on the visit to the U.S. Here the main organizational burden fell on the National Federation of Building Trades Employers, but the two architect members of the Team, the President and Mr. Robert Matthew, had by no means a 'joy ride.' To leave a town at 11 p.m., arrive at another at 8 a.m., be met by an enthusiastic crowd of architects and builders, spend all day on technical conferences and visits to buildings, have to make a speech at dinner, leave the town at 11 p.m. to start the routine all over again at another town and continue it day after day is much more like very hard work than 'joy-riding.' The Team's report is an intensely practical document that should teach us much though, as the report of the Working Party says, there are many things in American practice that we can not adopt over here.

The Festival of Britain. For the first time in the records of Institute transactions this feature gives the opportunity of relating the current decisions and work of committees to the events which made such decisions and work necessary. Thus the fact that the Institute—through several of its committees—has been increasingly engaged on consideration of the part it should itself play in the 1951 Exhibition celebrations reflects the policy of the Festival authorities to bring in all such professional bodies in order that they should organize activities complementary to the main and centrally organized festivities. This policy of the Festival organizers has been particularly noticeable on the side of the arts and architecture. The Institute was unofficially consulted before even the Exhibition organization developed, and the Institute is well represented on the Architecture Council that was subsequently set up as part of the Festival machinery.

In seeking the co-operation of the various professional bodies there is, of course, one inherent difficulty, that of finance. For any professional body, the extension of their activities and the consequent interference with their normal work involves additional expenditure. The R.I.B.A. is seeking to do its best within the framework of its everyday organization, since it would be manifestly impossible to do such things as cancel examinations and cease to administer ordinary problems of the profession in favour of the Festival. Details of the Institute's own Festival activities are now being settled and will be announced in due course.

Warsaw Conference of the U.I.A. The cancellation of this Conference has caused real disappointment to several members of the Institute. Two were endeavouring to motor to Warsaw, in spite of the fact that no travel organization or embassy of any of the countries to be traversed seemed able to advise on the petrol situation.

While full details are not yet known, it has become very clear that the postponement or cancellation of this Conference was due entirely to political considerations. Not only have the Poles refused to remain members of the International Union of Architects (U.I.A.) unless the Yugoslavs are excluded, but they demanded that the U.I.A. set its signature to the Cominform Peace Manifesto, which is clearly outside the province of the U.I.A. While there is a demand among members of the Institute to take every advantage of the travel facilities and the exchange of ideas which these international conferences provide, they do not expect to have to waste their time dealing with political complexities as well.

While a good deal of time and labour has been spent both by members and staff of the Institute, not all of it is lost. To ensure that there would be an adequate representation of British architecture at the Conference, the British National Committee had under preparation a small exhibition. The general theme had been worked out and progress is sufficiently advanced to justify completion, some time in July,

when this small exhibition will be available. It will be very suitable for other purposes both in this country and abroad.

Exhibitions. News, too, has been received of an exhibition of architecture in Kenya which the East Africa Institute of Architects has organized in connection with the Nairobi Centenary Celebrations. It is thought possible to arrange later for this exhibition to come to this country, perhaps in exchange for one of British architecture. Architects are also increasingly interested in the architecture of Brazil and the possibility, after the 1951 activities, of an exhibition of Brazilian architecture in London is being investigated.

General Meeting. Details have now been worked out for the General Meeting on 20 June, announced in the last JOURNAL. Three speakers will each review, from a particular point of view, the working of the Town and Country Planning Act to date. These reviews will be very short, leaving plenty of time in which it is hoped members will exchange practical experiences of the Act as it affects practice, rather than air individual grievances.

Annual Report. Once more the annual report is in members' hands and, by the time this appears in print, will have been considered at the Annual General Meeting. While the annual report recounts the work of the Institute for the year, it does not, of course, give to posterity any indication of the physical and economic factors affecting the building industry and the architectural profession during the period covered. Looking back, one can say that the last year has not differed materially from the preceding post-war years. Controls are still with us; there has perhaps been some easing in the supply position and a greater variety of choice of alternative materials; building costs have continued to rise, if only slightly. Against this somewhat sombre background the Royal Institute has had a successful year.

The Use of Bills of Quantities. The Council has been discussing with the National Federation of Building Trades Employers some change in the limit of value of work which may be tendered for without Bills of Quantities. The Institute put forward alternative suggestions that either the limit should be raised from £1,500 to £2,250, or a limit of area substituted for value, and in this connection 1,500 sq. ft. was suggested. The National Federation has not so far seen its way to agree to either suggestion. However, since then, the Working Party Report has been published, and in it the raising of this limit is specifically recommended.

L.C.C. Bye-laws. At the invitation of the L.C.C. the Institute has made observations upon the revised bye-laws which are to come into force for the next five year period. The R.I.B.A's. observations were mainly concerned with the restrictions imposed upon freedom of design by the requirements concerned with fire precautions. Further discussions will be held with a view to devising further revisions acceptable to the L.C.C. but less restrictive to the architect. These further modifications can not, of course, take effect until after the present five-year period.

Listing of Historic Buildings. The Council is not entirely satisfied with the position as regards both the arrangements for listing buildings of special architectural or historic interest under the Town and Country Planning Act of 1947—Section 30—and the administration system of protecting those buildings which have been listed.

In regard to the arrangements for listing, the Council supported the appeal made by the Georgian Group, the C.P.R.E. and other bodies against the recent decision by the Chancellor of the Exchequer to reduce the staff employed in listing buildings. The Council was not satisfied that adequate safeguards existed for the preservation of those buildings already listed, especially where they were owned by a local Planning Authority. The Council is still in correspondence with the Minister of Town and Country Planning in regard to this point.

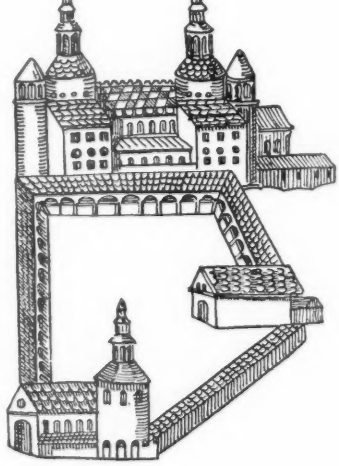
The Library's Drawings and Prints. For the past eight months the task of indexing the collection of drawings and prints, on a more systematic basis than hitherto, has been proceeding steadily under Mr. Cyril Bunt, for many years on the staff of the Victoria and Albert Museum, though a complete index is unlikely to be available in less than three years. During the war, with its dispersal of the library for reasons of safety, the drawings collection was perforce neglected and became to some extent disorganized, titles and notes in some cases becoming detached and lost. It was none the less slightly embarrassing to the Library staff at the recent exhibition of unidentified drawings held at the Annual Reception, when one member wrote on the form provided, 'I presented this drawing to the Institute ten years ago and they have not yet identified it!'

The Study of Building Needs. Study Group No. 1 of the Architectural Science Board on 'Building Needs' is nearing the end of its long deliberations with sociologists and economists. The Group has concentrated on devising a method of assessing factory needs, but the system adopted should serve as well for shops, schools, hospitals, community centres and large housing estates: for all types of building in fact where the client is a 'community' rather than an individual. All papers have now been written and discussed, and the chairman is engaged upon welding them together. The next meeting of the Group is likely to be its final one.

Procedure on Tenders. The report of the Working Party stresses that the need for early and full information to all who will be concerned on a building project is more than ever essential in these days of full employment. This will serve to remind members that it is now not only good practice but also perhaps patriotic to establish the habit of advising builders and sub-contractors at the earliest opportunity of their success or failure in tendering. The Practice Committee has recently had occasion to reiterate this advice and also to repeat that the architect should never open unsuccessful priced bills nor disclose the details of the successful ones to his clients—even where they are public authorities—though he may, of course, have access to the successful bills provided he does not use the information he gathers to the detriment of the builder.

Civil Service Posts. The upper age limit of 35 years imposed by the Civil Service Commissioners for competitive appointments to certain professional posts in Government Departments in 1950 has caused discontent in certain quarters. It may not be understood generally that this age limit excludes time spent in national service, so that an architect with six years war service could be a candidate up to the age of 41. Furthermore, the limit applies to the Recruiting or Assistant Grade only, entry into the higher grades is by other competitions which have very much higher upper age limits.

The Status of Salaried Architects. From time to time complaints are received by the Salaried and Official Architects' Committee from architects in Government departments who have no proper architectural status. A recent complaint has made it apparent that there is still a number of architects in different Ministries either engaged upon work which is not architectural or doing the work of architects and being called something else. It is an unsatisfactory state of affairs, and one which the Committee is exploring.



Correspondence

W. R. LETHABY

Sir,—In Mr. Noel Rooke's paper on 'Lethaby, Webb and Morris' he stated that particulars obtainable about Lethaby are scanty. Unfortunately this is so, but it is probably a case of the 'prophet not being without honour except in his own country'.

There are several 'bits' about him in the Barnstaple Athenæum. This was his native town, and he was articled to the late Mr. Alexander Lauder who not only designed farm buildings, mentioned by Mr. Rooke, but was a fine ecclesiastical architect, some of the best Gothic nonconformist churches in London and the provinces being his. No doubt Professor Lethaby learnt considerably about Gothic architecture when with him. Lauder himself was rather a genius and very versatile. He was one of the best Wesleyan Local Preachers in the Barnstaple Circuit and was a poet of very considerable talent. One of Lethaby's fellow-pupils with him at Barnstaple was the late Mr. W. H. Gould, architect, of Ilfracombe —to whom I was articled.

I remember that Mr. Gould, in 1893, told me that Lethaby had published a book *Leadwork* which was published in '93 and was bringing his name (Lethaby's) more than ever before peoples' notice.

I believe he received the Freedom of Barnstaple a few years ago, two others of that town's famous men who had received it just before being F. Carruthers Gould (1844-1925) the cleverest political caricaturist of the day, and the late H. J. Edwards, Doctor of Music, the celebrated composer of the West of England and Devon. Barnstaple has always been very proud of its town and its leading and best Freemen who have been given that honour.—Yours faithfully,

ALLEN T. HUSSELL [*F*]

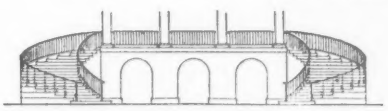
Mr. Hussell's letter was sent to Mr. Noel Rooke, who replies:

Sir,—It was a pleasure to read Mr. Hussell's letter, and to learn that Mr. Alexander Lauder, in whose office Lethaby made such a valuable start at Barnstaple, 'was rather a genius,' very versatile, and a poet of talent. Such a man must have helped early to give width and background to his pupil, whose native depth of character must have profited from such contacts.

Lethaby was 'admitted Honorary Freeman' of Barnstaple on 28 October 1926. Perhaps wrongly I have regarded this as somewhat of a domestic affair, not for the benefit of outsiders, like a mother's expression of proper natural pride accepted by a son with due humility and affection. He must have greatly valued it. He put a much higher value on the civilizing effect of civic pride, pride in one's own town, than is usual. But because even this honour among his own people was something of an assault on his humility I did not mention it, when so much had to be said in a short time. But in any case it does not, for me, affect the uniqueness of Manchester University's achievement in getting Lethaby to accept an honour from the outside world.

Recently I have seen obituary letters, by Mr. F. W. Troup in the R.I.B.A. JOURNAL of 8 August 1931, and by Mr. Arthur Keen in that of 31 September 1931, which are valuable contributions. Mr. Keen who was in Norman Shaw's office, gives Lethaby's age on arrival there as 21; this is to be compared with Mr. R. W. S. Weir's memory of one year later (from hearsay, as he himself did not come from Scotland till a little later), and my estimate of his age as being 24, based on memory of conversations of 35 years later, and 35 years back from now. One sentence from Mr. Keen's letter, concerning that period, should be quoted here: 'Lethaby's output was enormous. I think I never knew a man who worked harder or to better effect.'—Yours faithfully,

NOEL ROOKE



Notes and Notices

NOTICES

Eighth General Meeting Tuesday 20 June 1950 at 6 p.m.

The Eighth General Meeting of the Session 1949–50 will be held on Tuesday 20 June 1950 at 6 p.m. for the following purposes:

To read the minutes of the One Hundred and Twelfth Annual General Meeting held on 2 May 1950; formally to admit members attending for the first time since their election.

To read the report of the scrutineers appointed to examine the voting papers for the election of the Council for the Session 1950-51.

Professor W. G. Holford [*F*] to direct a discussion on the working of the Town and Country Planning Act. (Light refreshments will be provided before the meeting.)

Session 1949-50. Minutes VII

At the One Hundred and Twelfth Annual General Meeting held on Tuesday 2 May 1950 at 6 p.m.

Mr. Michael Waterhouse, M.C., President, in the Chair.

The meeting was attended by about 175 members.

The Minutes of the Sixth General Meeting held on Tuesday 7 March 1950 having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The following members attending for the first time since their election were formally admitted by the President:

AS FELLOWS:

F. G. Goodin, F. H. Herrmann, C. Max Lock, E. A. Lyons, J. L. S. Mansfield, F. L. Preston, F. H. Risdon, F. A. Ruhemann, Oscar Singer, R. J. Sneller, R. W. Symonds, H. C. Upton.

AS ASSOCIATES:

H. G. Ashton, Alfred Ball, Sidney Beesley, A. J. D. Bicknell, R. J. Bleasdale, C. M. Bollon, F. P. Brotherton, I. C. Brown, J. G. Bruce, Miss E. M. Caldecott, E. J. Cheeseman, P. H. Cherry, R. K. Chokshi, Mrs. A. M. Clark, P. A. Clarke, D. F. Clayton, A. G. East, R. F. S. Fenton, J. H. Finch, L. G. Hemmings, J. G. Hill, J. P. Hiner, L. F. Hobart, C. L. Howell, G. E. Hughes, S. C. Hunt, A. C. Judges, G. A. Kirby, R. A. Kitching, Ward Koss, B. D. Kovalevsky, Bernard Kreeger, Captain A. H. Langston, N. W. Lee, Miss Betty Lloyd, Edward Mendelsohn, Joseph Mendleson, C. E. Michell, P. G. Miller, Miss V. M. Mollin, Alan Morgan, P. F. Morrell, Miss J. M. Mountford, E. F. Oldfield, W. J. Oliver, R. W. Pass, Miss J. K. Poole, J. R. Reid, P. J. Reynolds, B. J. Richardson, H. O. Roberts, G. W. A. F. Rye, A. W. J. Seeley, B. C. Sharp, H. A. Smart, M. V. S. Smith, S. O. Smith, A. E. Souter, S. D. T. Spittle, S. L. G. Stacey, P. H. Steinberg, C. C. Steptoe, D. L. Tatnall, G. E. Thorne, Miss S. E. Todhunter, Kenneth Waite, Miss P. A. Walton, J. A. Wardley, L. P. Worby.

AS LICENTIATES:

Thomas Dixon, R. J. Parker, H. L. Williamson.

The President formally presented and moved the adoption of the Report of the Council and Committees for the official year 1949-50. The Honorary Secretary seconded the motion, and a discussion ensued.

The motion having been put from the Chair, it was resolved that the Report of the Council and Committees for the official year 1949-50 be approved and adopted.

The President stated that the list of attendances at the meetings of the Council during the Session had been laid on the table and would be printed in the JOURNAL and sent to members with the voting paper.

On the motion of the President, a hearty vote of thanks was passed by acclamation to Mr. Brian Peake [*F*] and Mr. Charles Sykes [*A*] for their services as Honorary Auditors for the past year.

Mr. Brian Peake [*F*] and Mr. Charles Sykes [*A*] were nominated for election as Honorary Auditors for the ensuing year of office.

The proceedings closed at 7.45 p.m.

R.I.B.A. Kalendar

The next issue of the Kalendar will be published in the autumn and members and Students wishing to notify new addresses, etc., for publication should do so as soon as possible. The last date for receiving changes for inclusion in the new Kalendar will be 31 May for those in the United Kingdom and the Republic of Ireland, and for those overseas the last date will be 30 June.

It will still be necessary to restrict members and Students to one address each.

British Architects' Conference, Bristol and Bath, 7-10 June

Final arrangements are being made for the various functions in connection with the Conference to be held in Bristol and Bath from 7 to 10 June. The programme and application form was enclosed with the March issue of the JOURNAL and the last date for applications was 13 May. If, however, there are any members or Students wishing to attend the Conference who have not submitted applications they should do so at once as it may be possible to accommodate them for at least some of the functions.

COMPETITIONS

Competition for Medical Buildings Extension, Edinburgh University

The University of Edinburgh invite architects to submit designs in competition for an extension to the Medical Buildings to be erected on a site on the north side of George Square, Edinburgh.

Assessor: Mr. A. G. R. Mackenzie, A.R.S.A. [*F*].
Premiums: 1,000 gns., 600 gns., 300 gns.
Last day for submitting designs: 30 September 1950.

Conditions may be obtained on application to the Secretary of the University, Edinburgh. Deposit £2 2*s*.

Competition for the Design of Concrete Bridges
The Cement and Concrete Association invite engineers and architects to submit designs in competition for prestressed, reinforced or plain concrete bridges over motorways.
Assessors: Sir Percy Thomas, O.B.E. (Past President); Mr. J. Cuerel, B.Sc., M.I.C.E.; Mr. A. Moller, M.I.Struct.E.; Mr. E. John Powell, M.I.C.E., M.I.Mun.E.; Mr. J. Reed, B.Sc., M.I.C.E., M.I.Struct.E., M.Cons.E.
Premiums: £500, £300, £200.
Last day for submitting designs: 31 May 1950.

Conditions may be obtained on application to the Cement and Concrete Association, 52 Grosvenor Gardens, S.W.1. Applications must be accompanied by a postal order for one shilling.

Architectural Competition: Nairobi City Hall
The Municipal Council of Nairobi, Kenya, invites architects resident in the United Kingdom and all British Dominions, Colonies and Dependencies to submit designs in competition for new City Halls and Offices which it proposes to erect in Nairobi.
Assessor: Prof. L. W. Thornton White [*F*], Cape Town.
Premiums: £550, £450, £250.
Last day for *posting* designs: 21 September 1950.

Conditions may be obtained on application, *preferably by air mail*, to the Town Clerk, P.O. Box 651, Town Hall, Nairobi, Kenya. Deposit £2 2*s*.

Proposed Memorial to the Royal Naval Patrol Service of the 1939-45 War at Lowestoft
The Imperial War Graves Commission invite architects who are ex-serving full time members of His Majesty's Forces to submit designs in competition for a Memorial which they propose to erect on a site in Bellevue Park, Lowestoft, to commemorate the names of officers and men of the Royal Naval Patrol Service fallen in the 1939-45 War who have no known graves.
Assessor: Mr. Edward Maufe, R.A. [*F*].
Premiums: £100, £60, £30.
Last day for submitting designs: 26 May 1950.

Conditions may be obtained on application to The Secretary, Imperial War Graves Commission, 32 Grosvenor Gardens, S.W.1. Deposit £1. Applicants for the conditions *must* state: (*a*) their architects registration number, (*b*) the branch of H.M. Forces in which they served.

COMPETITION RESULTS

University of Nottingham: Proposed Hall of Residence
1. Richard Turley and W. H. Williamson [*A*/*A*].
2. W. F. Howard [*F*].
3. J. D. Meade Taylor [*A*] and Miss J. V. Wilson.
Highly Commended: Taylor and Holt, Cecil Howitt and Partners [*F*/*A*/*A*], David du R. Aberdeen [*F*], C. Hyde, L. H. Bucknell [*F*], The Peter Dunham Group [*F*/*A*/*L*], Easton, Perlston and King, A. D. Geach [*A*].

Norfolk Education Committee: Competition for a County Modern (Secondary) School at Hunstanton
1. Alison M. Smithson and Peter D. Smithson [*A*/*A*].
2. John B. Diamond [*A*].
3. George Whitby, M.B.E. [*A*].
Commended: Louis Erdi [*L*], W. F. Mullins and and Frank S. Knight [*A*/*A*], D. D. Attwater and J. Baker Mellor [*A*/*A*].

Competition for War Memorial for Victoria College, Jersey
1. Margaret B. Brodie, B.Sc.(Arch.) Glas. [*A*].
2. R. B. Thomson, M.A. [*A*].
3. Harry and Elizabeth Speakman [*A*/*A*].
Commended: John Breakwell [*A*].

Whitehaven: Arts Centre
1. H. Cullerne Pratt and Ronald Peter Gray, M.B.E. [*A*/*A*].
2. Muriel Harrison and Ellis Miles [*A*/*A*].
3. J. W. Poltock, H. H. Laws and Garnham Wright [*A*/*A*/*A*].

Competition for a Health Centre, Manchester Building Trades' Exhibition
1. A. D. Sherwood.
2. Ellis Wilkinson [*A*].
3. Doris and Christine Bowman.

Competition for the Interior Design of the Modern Public House. Mr. Peter Oldfield, whose design was commended, is an Associate, R.I.B.A. and this affix should have appeared after his name on page 243 of the April JOURNAL.

ALLIED SOCIETIES

Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects
The annual dinner of the Association was held at the Dujon Restaurant, Bedford, on 30 March. Mr. S. Vincent Goodman, President of the Association, presided. Sir Frederick Mander, M.A. (Chairman of Bedfordshire Education Committee) proposed the toast of 'The R.I.B.A. and the Allied Societies' and Mr. Michael Waterhouse, President, R.I.B.A., and Mr. Goodman both responded.

Mr. Goodman referred to the growth and activities of the Association and the attendance in large numbers of the younger members at lectures and discussions.

Professor A. E. Richardson, R.A., M.A., F.S.A., proposed the health of the guests. In dealing with the historical and antiquarian aspects of the architecture of the county of Bedfordshire, Professor Richardson spoke of the many distinguished architects who had built fine buildings in the county since before the Civil War. Fortunately, he said, there were still architects who gained inspiration from the visual arts. He pleaded for grace and elegance which were needed today more than ever before. The Mayor of Bedford, Alderman A. L. Nicholls, M.C., and the Lord Lieutenant for Bedfordshire, Lt.-Col. D. C. Part, O.B.E., responded to Professor Richardson's toast.

Other guests included Lord and Lady Luke, Captain C. Soames, M.P., and Mrs. Soames, Sir John and Lady Brown, the Mayoress of Bedford, Lady Mander, Mrs. Michael Waterhouse, Mrs. Vincent Goodman and Mr. C. D. Spragg, C.B.E., Secretary, R.I.B.A.

GENERAL NOTES

Developments in Timber Technique. *Correction.* It is regretted that on p. 185 of the March 1950 JOURNAL the architect of the clothing factory at Congleton, Cheshire (Fig. 9a) was given as Rudolf Frankau. It should have been Rudolf Frankel.

R.I.B.A. Golfing Society
A meeting of the R.I.B.A. Golfing Society was held at the Berkshire Golf Club on Monday 24 April, and the results were as follows: The Sullivan Trophy was won by A. V. Farrier with a score of 92—16—76. Runners-up were W. R. C. Clarke, 88—9—79; W. D. White, 93—14—79; and E. H. Firmin, 84—5—79.

The four-ball Stapleford competition in the afternoon was won by Sir Giles Scott and W. R. F. Fisher with a score of 36½ points.

R.I.B.A. Golfing Society v. Building and Allied Trades Golfing Society
The match was played on 28 March, resulting in a win for the Architects by 14½ matches to 5½.

Notes from the Minutes of the Council

MEETING HELD 4 APRIL 1950

Appointments
(A) Building and Civil Engineering Regional Joint Production Committees: Region No. 9: Midlands: Mr. J. B. Surman [*F*] in place of the late Mr. S. J. Stainton [*F*].

(B) B.S.I. Committee M/1: Units and Technical Data: Mr. Charles Sykes [*A*] in place of Mr. J. Ernest Franck [*F*], who was previously representing the Institute on this Committee.

Grants: The Council approved the following list of grants for the year 1949-50:

	£	s.	d.
British School at Rome ..	750	0	0
Architects' Benevolent Society	150	0	0
British School of Archaeology at Athens	50	0	0
British Standards Institution ..	26	5	0
Parliamentary and Scientific Committee	26	5	0
Council for the Preservation of Rural England	50	0	0
Association for the Preservation of Rural Scotland	10	0	0
Council for the Preservation of Rural Wales	7	0	0
International Federation for Housing and Town Planning	5	0	0
British School at Rome, Faculty of Archaeology	3	3	0
Architectural Association Lantern Slide Collection.. ..	100	0	0

Listing of Buildings of Special Architectural or Historic Interest: The Council considered the effect of the recent decision to reduce the staff in the Ministry of Town and Country Planning concerned with preparing schedules of buildings of special architectural or historic interest. The Secretary also reported that, as decided at their previous meeting, a letter had been sent to the Minister of Town and Country Planning urging that action should be taken in regard to those buildings which had already been listed and for which it appeared that so far no preservation orders had been made.

Exhibition of Transport: On the advice of the Public Relations Committee it was agreed to postpone the exhibition of transport from June 1950 to February 1951. This decision was taken because much valuable material in the process of preparation would be available at the later date, but could not be so earlier.

Lecture on the Work of Moholy-Nagy: It was agreed that the Institute should sponsor jointly with the Institute of Contemporary Arts a lecture to be given by Mrs. Moholy-Nagy on the work of her husband on 24 May 1950 at the R.I.B.A.

Town and Country Planning Act, 1947: Discussion Evening: On the joint recommendation of the Public Relations Committee and the Town and Country Planning and Housing Committee it was agreed to devote the General Meeting on 20 June 1950 to a discussion of the working of the Town and Country Planning Act 1947.

Draft Forms of Agreement for Use Between a Building-Owner and an Architect: On the recommendation of the Practice Committee the Council approved draft forms of agreement between a building-owner (including a statutory authority) and a firm of architects,

between a local authority and a firm of architects for housing work and between a local authority and a firm of architects for multi-storey flats.

Membership: The following members were elected: as Honorary Fellow, 1; as Honorary Associate, 1; as Fellows, 19; as Associates, 140. Students: 82 Probationers were elected as Students.

Applications for Reinstatement: The following applications were approved: as Associate, Geoffrey Somerton; as Licentiate, Stanley Norman Slipper.

Resignations: The following resignations were accepted with regret: Norman Jewson [*F*], Robert George Roberts [*Retd. F*], William Monk [*L*].

Application for Transfer to Retired Members' Class under Bye-law 15: The following application was approved: as Retired Associate: William Pritchard.

Obituary: The Secretary reported with regret the death of the following members: Joseph Pybus Jackson [*F*], Richard Wakeham White [*F*], Arthur Jessop Hardwick [*Retd. F*], John Harry Woodhall Hickton [*Retd. F*], John Bruce Merson [*Retd. F*], Harry Redfern [*Retd. F*]. Edgar Burnett [*A*], George Gunn [*A*], William Gibson Henderson [*A*], Sidney Inskip Ladds [*A*], Herbert A. Legge [*A*], Joseph Peascod [*A*], Walter Turner [*A*], Ernest Edward Bentley [*L*], Leonard Francis Cavanagh [*L*], Ernest Charles Cooper [*L*], Richard Jowett Edmondson [*L*], John Bright Gladstone [*L*], Ernest Charles Higman [*L*], Harold George May [*L*], Frank Sanderson [*L*], Hugh Spencer Stowell [*L*], John Tonner [*L*], Henry Burcombe Williamson [*L*], Ernest Carless [*Retd. L*].

Membership Lists

ELECTION: 2 MAY 1950

The following candidates for membership were elected on 2 May 1950:

AS FELLOWS (2)

Bouchard: Valmer Dudley, B.A., B.Arch. (McGill) [*A* 1933], Hamilton, Bermuda.

Onions: Wilfred Richmond, B.Arch. (McGill) [*A* 1933], Hamilton, Bermuda.

AS ASSOCIATES (6)

Benjamin: Ezekiel Moses, Bombay, India.

Inglis: Alick Walter Gordon, Kampala, Uganda.

King: Gordon Grimley, D.S.O., B.Arch. (Sydney), Sydney, Australia.

Morgan: Mary Patricia (Mrs.), Tabora, Tanganyika.

Smith: Warwick Leslie, Sydney, Australia.

Thirsk: John, Salisbury, Southern Rhodesia.

ELECTION: 20 JUNE 1950

An election of candidates for membership will take place on 20 June 1950. The names and addresses of the candidates with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Tuesday 30 May 1950.

The names following the applicant's address are those of his proposers.

FELLOWS (5)

Brittain: Thomas Arnold [*A* 1943], Borough Architect, Brendan House, Widnes; 12 Coroners Lane, Widnes. Frank Mellor, J. H. Gibbons, J. R. Piggott.

Devereux: Alan Henry, B.A.(Arch.) (Lond.) [*A* 1931], 3 Gower Street, Bedford Square, W.C.1; 24 Bracknell Gardens, Hampstead, N.W.3. Sydney Tatchell, Sir Hubert Worthington, Prof. H. O. Corfiato.

Morter: Philip Sidney Pelham, Dipl.Arch. (L'pool) [*A* 1932], Messrs. Marks and Spencer Ltd., Michael House, 82 Baker Street, W.1; Flat 4, 34A Sydenham Hill, S.E.26. Lieut.-Col. Ernest Gee, Norman Jones, P. Hickey.

Neel: George Edric, M.A., A.M.T.P.I. [*A* 1938] 81 Piccadilly, W.1; 1 Oakhill Avenue, N.W.3. Raglan Squire, Frederick Gibberd, M. H. Thomas.

Roberts: Charles William [*A* 1936], 'Rathlin', Barnfield Hill, Exeter, Devon; 15 The Green, Shaldon, S. Devon. C. A. Farey, J. Challice, F. W. Beech.

AS ASSOCIATES (109)

The name of a school, or schools, after a candidate's name indicates the passing of a recognized course.

Abbott: Henry [Final], 'Fron', Llanengan, Abersoch, Caernarvonshire. J. G. McBeath, F. Chippindale, and applying for nomination by the Council under Bye-law 3 (*d*).

Atkinson: Basil Norman (Arch. Assoc. (London): Sch. of Arch.), 32 Manor Road, Harrow, Middlesex. R. F. Jordan, E. Forster, J. W. Wilcox.

Bailey: Digby Blair [Final], 40 Balmoral Road, St. Andrews, Bristol, 7. G. D. G. Hake, E. H. Button, T. H. B. Burrough.

Bailey: John Desmond [Final], 'Gerr-Ville', Comber Road, Dundonald, Co. Down. Frank McArdle, R. H. Gibson, J. R. Young.

Baldwin: Kenneth [Final], 46 Clifton Common, Brighouse, Yorkshire. Norman Culley, N. R. Paxton, Hubert Bennett.

Baynes: Edward Anthony John (Arch. Assoc. (London): Sch. of Arch.), 57 Glenmore Road, N.W.3. R. F. Jordan, G. H. N. Inman, Robert Cromie.

Begbey: David Charles [Special Final], 33 Sidney Road, Beckenham, Kent. A. W. Harwood, M. E. Walker, H. M. Luyken.

Boal: Alexander Mather (Major), M.C., Dipl. Arch. (Leeds) (Leeds Sch. of Arch.). 14 Harlow Moor Drive, Harrogate. Applying for nomination by the Council under Bye-law 3 (*d*).

Bradley: Peter Guy, Dip.Arch. (The Polytechnic) (The Poly., Regent Street, London: Sch. of Arch.), 'Tauranga', Doric Avenue, Southborough, Kent. J. S. Walkden, David Jenkin, Rolf Hellberg.

Brimicombe: Millicent Anne (Mrs.) [Final], Flat 3, 7 Wetherby Place, S.W.7. L. S. Stanley, L. M. Gotch, J. S. Beard.

Broodryk: Cornelius Almeroe (Passed a qualifying examination approved by the I.S.A.A.), c/o The Standard Bank of South Africa, 9 Northumberland Avenue, W.C.2. Prof. L. W. T. White, O. Pryce Lewis, S. H. Todd.

Browne: Kenneth George (Arch. Assoc. (London): Sch. of Arch.), 52 St. Stephen's Gardens, Bayswater, W.2. R. F. Jordan, E. Forster, J. W. Wilcox.

Burden: Godfrey Wilfred (Victoria Univ. (Manchester): Sch. of Arch.), 64 Liverpool Road, Chester. Prof. R. A. Cordingley, J. P. Nunn, F. L. Halliday.

Burrows: Monica Elizabeth (Miss), Dip.Arch. (Leics.) (Leicester Coll. of Art and Tech. Sch. of Arch.), 40a Lower Belgrave Street, S.W.1. F. Chippindale, Richard Sheppard, David Booth.

Chapman: Dennis Edward (Northern Poly. (London): Dept. of Arch.), 2b Queens Road, Twickenham, Middlesex. T. E. Scott, T. H. Smith, A. J. May.

Clark: Peter Lewis (Leicester Coll. of Art and Tech. Sch. of Arch.), 15 Beech Drive, Denholme, nr. Bradford, Yorks. F. Chippindale, W. Illingworth, Eric Morley.

Clarkson: Harry [Special Final], 100 Leigh Avenue, Widnes, Lancs. E. A. Newton, Frank Mellor, Harold Butterworth.

Clayton: Dorothy Joan (Miss), Dipl.Arch. (L'pool) (Liverpool Sch. of Arch.: Univ. of Liverpool), c/o Mrs. Close, Geeston Cottage, Ketton, Stamford, Lincs. Prof. L. B. Budden, B. A. Miller, Donald Brooke.

Coleridge: Francis Stephen, D.S.C. (Arch. Assoc. (London): Sch. of Arch.), 12 Paradise Walk, Chelsea, S.W.3. Edward Playne, A. R. F. Anderson, E. Forster.

Cooper: Charles Geoffrey, Dip.Arch. (Nott'm) (Nottingham Sch. of Arch.), 6A Burns Street, Waverley Street, Nottingham. J. W. M. Dudding, T. C. Howitt, Percy Bartlett.

Crockett: Godfrey Mercier [Special Final], 14 South Frederick Street, Dublin. Prof. J. V. Downes, Vincent Kelly, J. Munden.

Crump: Denis Hincksman (Arch. Assoc. (London): Sch. of Arch.), Oaks Farm, Shirley, Croydon, Surrey. Cecil Burns, J. K. Hicks, Charles Blythin.

Cullingworth: Patrick John, Dip. Arch. (Leics) (Leicester Coll. of Art and Tech. Sch. of Arch.), 38 Eastleigh Road, Leicester. F. Chippindale, S. Penn Smith, G. A. Cope.

Cunnington: Pamela Mary (Miss) [Final], 155a Denmark Hill, S.E.5. Norman Keep, G. H. N. Inman, J. S. Walkden.

Dawes: Alan Trevor, Dip. Arch. (Nott'm) (Nottingham Sch. of Arch.), 'Peveril', Chadfield Road, Duffield, nr. Derby. T. W. East, E. H. Ashburner, A. E. Eberlin.

Day: Alexander Charles [Special Final], 38 Range Road, Whalley Range, Manchester, 16. Henry Elder, L. S. Stanley, Edgar Sutcliffe.

Dennis: Oliver Rothwell, Dip. Arch. (Manchester) (Victoria Univ. (Manchester): Sch. of Arch.), 11 Peter Street (4th Floor), Manchester, 2. Prof. R. A. Cordingley, J. P. Nunn, F. L. Halliday.

Doe: Donald Brian [Final], North Luffenham Hall, Oakham, Rutland. C. W. Box, Trenwith Wills, S. R. Pierce.

Donnan: Arthur Hawthorne [Special Final], 'Montrose', Prince of Wales Road, Dorchester, Dorset. L. S. Stanley, C. G. Stillman, and applying for nomination by the Council under Bye-law 3 (*d*).

Dovey: George Chadwick [Final], 25 Turret Road, Wallasey. Percy Howard, E. S. Benson, Herbert Thearle.

Fairbrother: Arthur [Special Final], 13A Queens Road, Chadderton, nr. Oldham. L. S. Stanley, Harold Bowman, K. E. Black.

Farrow: Hedley Charles [Special Final], 11A Stratheden Parade, Blackheath, S.E.3. William Mollison, F. Chippindale, T. E. Scott.

Fox: Charles Peter, Dipl. Arch. (Leeds) (Leeds Sch. of Arch.), 'Belvedere', Boston Spa, Yorks. W. A. Eden, J. E. Stocks, N. R. Paxton.

Freeland: Malcolm, B.Arch. (Witwatersrand), Dip. C.D. (L'pool) (Passed a qualifying examination approved by the I.S.A.A.), 15 Cliveden Place, S.W.1. Gordon Leith, Prof. Gordon Stephenson, Prof. William Holford.

Gardner: Roy [Final], 83 Beech Avenue, Holgate, York. C. E. Pearson, A. N. Thorpe, C. W. C. Needham.

Gherardin: Walter (Passed a qualifying examination approved by the R.A.I.A.), c/o Bank of New South Wales, 47 Berkeley Square, W.1, L. M. Perrott, Leighton Irwin, J. F. D. Scarborough.

Greenslade: Keith James Inglis [Final], 262 Fishponds Road, Bristol, 5. G. D. G. Hake, T. H. B. Burrough, A. J. Knott.

Harris: Harold Leslie William [Final], 5A Cheam Common Road, Worcester Park, Surrey. Norman Keep, E. M. Rice, Walter Goodesmith.

Harrison: Vera Rosemary (Miss) [Final], 29 Shipley Road, Westbury-on-Trym, Bristol. G. D. G. Hake, Sir George Oatley, T. H. B. Burrough.

Hendry: Leslie Alec [Final], 96 Roberts Street, Grimsby. J. Konrad, G. D. Harbron, Edgar Farrar.

Henry: Thomas Edward Fitzgerald, M.A. [Special Final], 29 Woodstock Road, N.W.11. T. W. Henry, R. H. Gibson, J. R. Young.

Home: Jacqueline Marcelle Howe (Mrs.) (Arch. Assoc. (London): Sch. of Arch.), 9A Wilbraham Place, S.W.1. R. F. Jordan, H. G. Goddard, G. H. N. Inman.

Hughes: Patrick Alan Latham (Arch. Assoc. (London): Sch. of Arch.), Rubery, Fairfield Road, Blandford, Dorset. R. F. Jordan, A. R. F. Anderson, E. Forster.

Insall: Donald William [Final], 'Beaumont', Northumbria Drive, Henleaze, Bristol. G. D. G. Hake, T. H. B. Burrough, Prof. A. E. Richardson.

Ireland: Gerald John (Leicester Coll. of Art and Tech. Sch. of Arch.), 40 Brean Down Avenue, Henleaze, Bristol, 6. F. Chippindale, S. Penn Smith, G. A. Cope.

Isherwood: Ernest Gerald [Final], 3 Church Hill, Leamington Spa. Arthur Korn, C. H. Elkins, E. A. L. Martyn.

James: John Lewis Thomas [*L*] [Special Final], 67 Lake Road West, Cardiff. W. M. Traylor, W. A. Woodland, C. F. Bates.

Johnson: Geoffrey Clifford (Birmingham Sch. of Arch.), 11 World's End Lane, Quinton, Birmingham, 32. A. Douglas Jones, T. M. Ashford, A. R. Young.

Johnstone: William Peat [Special Final], Asst. County Architect, 10 Market Street, Stranraer, Wigtownshire. L. W. Hutson, Prof. W. J. Smith, William McCrea.

Kerr: Peter Everard [Special Final], 8 Southfield Road, Cotham, Bristol, 6. R. M. Love, H. F. Trew, and applying for nomination by the Council under Bye-law 3 (*d*).

Kerr: Thomas Frederick [Final], 67 Spencer Street, Holywood, Co. Down. L. S. Stanley, W. J. H. Stevenson, J. H. Stevenson.

Kerr-Lucarotti: Francis [Special Final], 630 High Road, North Finchley, N.12. T. E. Scott, L. S. Stanley, G. A. Mitchell.

Kharkar: Meghashyam Shantaram [Final], 43 Bath Road, Hounslow, Middlesex. C. E. Culpin, A. W. Reading, and applying for nomination by the Council under Bye-law 3 (*d*).

Killeen: Dennis William [Special Final], 13 Tugela Road, West Croydon, Surrey. J. K. Hicks, E. D. Mills, R. T. Currie.

Kind: Reginald Arthur Bloor [Special Final], 2 Abbey Gardens, Whitehall, Shrewsbury. J. B. Surman, A. G. Chant, C. W. Box.

Law: Dennis Kingsbury, B.A. (Manchester) (Victoria Univ. (Manchester): Sch. of Arch.), 947 Rochdale Road, Walsden, Todmorden, Lancs. Prof. R. A. Cordingley, F. L. Halliday, J. P. Nunn.

Lawton: Thomas Whitehead [Special Final], 160 Wilsthorpe Road, Long Eaton, nr. Nottingham, G. L. Broadbent, K. W. F. Harris, H. H. Dawson.

Layton: John Dennis (Arch. Assoc. (London): Sch. of Arch.), 12 East View, Barnet, Herts. R. F. Jordan, A. R. F. Anderson, E. Forster.

Little: Arthur [Final], 363 Manchester Road, Droylsden, Manchester. Henry Elder, F. M. Reynolds, W. C. Young.

Lloyd: David John (Northern Poly. (London): Dept. of Arch.), 39 Holdenhurst Avenue, North Finchley, N.12. T. E. Scott, Richard Sheppard, B. E. Dixon.

McLean: Hector William [Final], 3 Palace Place, Brighton. K. E. Black, A. F. A. Trehearne, A. J. McLean.

Mann: Trevor Bernard (The Poly., Regent Street (London): Sch. of Arch.), 11 Netherby Road, Honor Oak, S.E.23. J. S. Walkden, David Jenkin, and applying for nomination by the Council under Bye-law 3 (*d*).

Manning: Derek Glaister [Final], 'Clydesdale', 66 Chelmsford Road, Shenfield, Essex. J. M. Scott, Laurence King, J. S. Walkden.

Marshall: Brenda Mary (Miss), Dip. Arch. (The Polytechnic) (The Poly., Regent Street (London): Sch. of Arch.), Casa Mia, 13 Ecclesbourne Gardens, N.13. J. S. Walkden, D. W. Aldred, A. A. Briggs.

Measday: Clifford Maurice [Final], 4 Keswick Avenue, Merton Park, S.W.19. T. G. Crump, E. M. Rice, J. K. Hicks.

Mitchell: Arthur Matthew [Special Final], 6 Fourth Avenue, Newton Hill, Wakefield, Yorks. Hubert Bennett, Spencer Silcock, L. S. Stanley.

Parsons: Jack Edward [Special Final], 'Northview', 11 Conolly Road, Hanwell, W.7. G. M. Adie, Thomas Bilbow, F. C. Button.

Pearce: Donald Wilfred [Special Final], Higher Farm Cottage, Dewlish Mill, Dorchester, Dorset. J. S. Walkden, H. E. Matthews, Cyril Fifield.

Philp: William Spencer [Special Final], 16 Redan Street, Ipswich, Suffolk. E. J. Symcox, A. N. Harris, W. T. Higgins.

Pienaar: Daniel Johannes, B.Arch. (Rand) (Passed a qualifying examination approved by the I.S.A.A.), c/o E. Mayorcas, Esq. [*F*], 13 David Mews, Baker Street, W.1. Elie Mayorcas and applying for nomination by the Council under Bye-law 3 (*d*).

Pinfold: William John, B.Arch. (Dunelm) (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne: Sch. of Arch.), 21 Bede Burn Road, Jarrow, Co. Durham. Prof. W. B. Edwards, J. H. Napper, T. A. Page.

Pinion: John Thomas, B.A. (Cantab.) [Special Final], 105 Queens Road, Hertford, Herts. C. H. Aslin, Rolf Hellberg, E. C. Kent.

Pitts: James Noel (Leicester Coll. of Art and Tech. Sch. of Arch.), c/o 110 Park Road, Loughborough. F. Chippindale, G. A. Cope, S. Penn Smith.

Powell: Arthur Thomas (Leicester Coll. of Art and Tech. Sch. of Arch.), 1 Brean Down Avenue, Henleaze, Bristol. F. Chippindale, S. Penn Smith, G. A. Cope.

Roberts: Philip Henry (Leicester Coll. of Art and Tech. Sch. of Arch.), 30 The Fosseway, Syston, Leicester. F. Chippindale, G. A. Cope, T. W. Haird.

Robertson: Peter McDonald [Special Final], 4 St. Colme Street, Edinburgh. W. H. Kininmonth, James Shearer, L. S. Stanley.

Rutherford: Audrey Joyce (Miss), B.Arch. (L'pool) (Liverpool Sch. of Arch.: Univ. of Liverpool), 6 Curzon Avenue, Wallasey, Cheshire. Prof. L. B. Budden, Donald Brooke, B. A. Miller.

Samuel: Edward Frewin (Arch. Assoc. (London): Sch. of Arch.), 12 Paultons Square, S.W.3. R. F. Jordan, H. G. Goddard, H. G. Cherry.

Sant: William Howard, Dip. Arch. (The Polytechnic) (The Poly., Regent Street (London): Sch. of Arch.), 10 Brookview Road, Streatham, S.W.16. J. S. Walkden, David Jenkin, R. G. Brocklehurst.

Scott: Ian Murdoch Campbell, Dip. Arch. (The Polytechnic) (The Poly., Regent Street London: Sch. of Arch.), 30 Raymond Road, Wimbledon, S.W.19. J. S. Walkden, J. E. M. Macgregor, David Jenkin.

Sharma: Manmohan Nath (Leicester Coll. of Art and Tech. Sch. of Arch.), 20 Gower Street, W.C.1. F. Chippindale, S. Penn Smith, Howard Lobb.

Shaw: Bruce Patterson, Dip. Arch. (Sydney) (Passed a qualifying examination approved by the R.A.I.A.), 52D Princes Square, W.2. A. F. B. Anderson, R. Atkinson, David Carr.

Sheldon: John Francis [Final], 86 Hampton Road, Twickenham, Middlesex. Hugh Casson, E. D. Mills, J. S. Walkden.

Sprott: Ferguson [Final], 'Gladwyn', Clifton Road, Bangor, Co. Down. Frank McArdle, J. R. Young, R. H. Gibson.

Steel: Reginald Charles Thomas [Final], 'The Firs', Penton Road, Staines, Middlesex. W. J. Reed, H. M. Luyken, V. L. Nash.

Steen: Kenneth [Special Final], Actons Farm, High Wych, Sawbridgeworth, Herts. G. D. G. Hake, T. H. B. Burrough, P. V. Mauger.

Stevens: Reginald [Special Final], 42 Holmes Street, Derby. T. W. East, E. W. Pedley, E. H. Ashburner.

Tandy: Keith Hopewell Bowman, B.Arch. (Sydney) (Passed a qualifying examination approved by the R.A.I.A.), c/o Bank of New South Wales, 47 Berkeley Square, W.1. W. R. Richardson, E. L. Thompson, Prof. A. S. Hook.

Taylor: Ivor Arthur Thomas [Final], 10 Marle Hill Parade, Cheltenham. Thomas Overbury H. F. Trew, S. E. Urwin.

Thomas: Ronald Arthur [Special Final], 29 Ethelbert Gardens, Ilford, Essex. W. J. Read, D. W. Aldred, H. M. Luyken.

Tischler: Franz Friedrich [Final], 113 Clapton Common, E.5. David Jenkin, F. R. S. Yorke, Norman Keep.

Tompkin: Harry, Dip. Arch. (Leics.) (Leicester Coll. of Art and Tech. Sch. of Arch.), 10 Cosby Road, Countesthorpe, Leicester. F. Chippindale, S. Penn Smith, G. A. Cope.

Topping: William David [Special Final], 57 Lyndhurst Avenue, Sunbury-on-Thames, Middlesex. G. A. Henry, R. S. Wilshere, R. H. Gibson.

Trindall: Leonard William [Final], 9 Cambray Place, Cheltenham, Glos. S. E. Urwin, H. W. Smith, H. T. Buckland.

Trinder: George Thomas (Northern Poly. (London): Dept. of Arch.), 30 Hunters Grove, Romford, Essex. T. E. Scott, O. P. Milne, A. Underhill.

Tunstill: John Burn [Special Final], 'High Winds', 167 Queensgate, Bridlington, Yorks. S. M. Richmond, G. G. Speight, G. S. Pester.

Turner: Geoffrey [Final], 2 Edward Avenue, Sutton-in-Ashfield, Notts. Clarence Bacon, F. W. Tempest, J. W. M. Dudding.

Uren: Victor [Special Final], 13 Fairview Terrace, Exmouth, Devon. B. W. Oliver, H. M. R. Drury, H. B. Rowe.

Walker: James [Special Final], 22 Ilsley Road, Erdington, Birmingham. J. W. Wilson, S. Bentley, J. B. Surman.

Watkins: Michael Vivian Harford, Dip. Arch. (Cardiff) (Welsh Sch. of Arch.: The Tech. Coll., Cardiff), 'Hillside', Ffynone, Swansea. Lewis John, W. A. S. Lloyd, E. E. Morgan.

Watson: Douglas Harold Roy [Final], 13 The Drive, Shoreham-by-Sea, Sussex. L. S. Stanley, A. W. Reading, C. W. Box.

Watts: Donald William [Special Final], 30c Palmerston Road, Buckhurst Hill, Essex. R. C. Foster, Harold Mileson, A. Thomerson.

Westgarth: Constance May (Miss), Dip. Arch. (Dunelm) (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne, Sch. of Arch.), 102 Beaufort Mansions, Beaufort Street, S.W.3. Prof. W. B. Edwards, J. H. Napper, G. C. Wilson.

Wilkie: Charles Cunningham [Special Final], 35 Collingham Road, S.W.5. K. M. Winch, Gordon Tait, H. R. Ross.

Wills: Barbara Ann (Miss) [Final], Greenways, Darlington Place, Bathwick Hill, Bath. G. D. G. Hake, E. H. Button, H. D. Roberts.

Wood: Elizabeth Mary (Miss), Dip. Arch. (Leics) (Leicester Coll. of Art and Tech. Sch. of Arch.), Aylwyn House, Stockton Brook, Stoke-on-Trent, Staffs. F. Chippindale, S. Penn Smith, G. A. Cope.

Workman: Hugh Cressy Skeete (Arch. Assoc. (London): Sch. of Arch.), 'Little Sandford', Snowhill, Copthorne, Sussex. R. F. Jordan, F. T. Orman, I. F. Roberts.

Wren: Derek Alan [Final], 'Meavy', Stein Road, Southbourne, nr. Emsworth, Hants. C. G. Stillman, R. T. Grummant, H. W. Burchett.

Yendall: Raymond Alan, Dip. Arch. (Dunelm) (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne, Sch. of Arch.). 106 Moorside North, Fenham, Newcastle-upon-Tyne, 4. Prof. W. B. Edwards, J. H. Napper, G. R. Clayton.

AS LICENTIATES (8)

Andrews: John, c/o Messrs. E. C. P. Monson [*F*/*A*], Finsbury Pavement House, 120 Moorgate, E.C.2; 45 Lindsay Road, Worcester Park, Surrey. H. C. H. Monson, Brigadier Gerald Shenstone, M. K. Matthews.

Ashton: Harold, 97 Church Street, Blackpool; 24 Halifax Street, Blackpool. C. H. MacKeith, Halstead Best, H. T. Jackson.

Hemming: Frank Edward, c/o The Borough Surveyor, Council House, Smethwick, Staffs; 106 Pierce Avenue, Olton, Birmingham, 27. S. N. Cooke, W. N. Twist, C. H. Elkins.

Maidment: John Douglas, c/o Messrs. John W. Beaumont and Son [*F*], 13 Collegiate Crescent, Sheffield, 10; 22c Clarkhouse Road, Sheffield, 10. Prof. Stephen Welsh, J. S. Beaumont, Robert Cawkwell.

Mills: Charles James, c/o South Audley Street, W.1; 56 Church Road, Epsom, Surrey. S. B. Caulfield, H. A. Welch, F. J. Lander.

Payne: William Arthur, Architects' Department, Hemel Hempstead Development Corporation, Hemel Hempstead; 5 Hillside Gardens, Berkhamsted, Herts. H. K. Ablett, G. Val. Myer, F. J. Watson-Hart.

Toms: Richard William, c/o Messrs. Louis de Soissons and Partners [*F*/*A*/*A*], 11 The Crescent, Plymouth; 21 Torrington Place, North Road, Plymouth. Louis de Soissons, W. F. Howard, F. R. S. Yorke.

Youldon: Sidney Paul, M.C., F.R.I.C.S., Hambledon R.D.C. Offices, Bury Fields, Guildford; Elgon, Grove Road, Merrow, Guildford. R. D. Scott, G. M. Aylwin, A. J. Stedman.

ELECTION: 10 OCTOBER 1950

An election of candidates for membership will take place on 10 October 1950. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, R.I.B.A., not later than Saturday 12 August 1950.

AS ASSOCIATES (23)

The name of a school, or schools, after a candidate's name indicates the passing of a recognized course.

Chicken: Norman, B.Arch. (Cape) (Passed a qualifying examination approved by the I.S.A.A.), 'Sanjeanor', Ave Grande, Newlands, Cape Town, S. Africa. Prof. L. W. T. White, O. Pryce Lewis, D. R. Harper.

Corcoran: Patrick Henry, B.Arch. (Dublin) (Sch. of Arch.: Univ. Coll., Dublin), c/o P. W. D., Khartoum, Sudan. Raymond McGrath, P. F. Lester, J. V. Downes.

Dawson: Eric Vernon, Dip. Arch. (Auckland) (Passed a qualifying examination approved by the N.Z.I.A.), 20 Brandon Street, Wellington, New Zealand. W. G. Young, and the President and Hon. Secretary of the N.Z.I.A. under Bye-law 3 (*a*).

Gilling: Ronald Andrew (Passed a qualifying examination approved by the R.A.I.A.), 62 Castlereagh Street, Sydney, N.S.W., Australia. Prof. Leslie Wilkinson, S. G. Thorp, F. G. Gilling.

Glasstone: Victor Stanley (Passed a qualifying examination approved by the I.S.A.A.), 'Katanga', Rosmead Avenue, Kenilworth, Cape Town, S. Africa. Prof. L. W. T. White, O. Pryce Lewis, M. Policansky.

Hugo-Brunt: Michael (Passed a qualifying examination approved by the I.S.A.A.), E12, Ex-Servicemen's Res., Rhodes Avenue, Mowbray, Cape, S. Africa. Prof. L. W. T. White, O. Pryce Lewis, D. R. Harper.

Hyland: Ethel Margaret (Miss), B.Arch. (Sydney) (Passed a qualifying examination approved by the R.A.I.A.), 43 Darlinghurst Road, Sydney, N.S.W., Australia. D. K. Turner, G. L. Moline, Miss Ellison Harvie.

Jones: Frank Oxton (Passed a qualifying examination approved by the N.Z.I.A.), 80 Linton Street, Palmerston North, New Zealand. Prof. A. C. Light, and the President and Hon. Secretary of the N.Z.I.A. under Bye-law 3 (*a*).

Larsen: Gordon James, Dip. Arch. (Auckland) (Passed a qualifying examination approved by the N.Z.I.A.), c/o P. W. D., Fiji Government, Suva, Fiji. Prof. A. C. Light, and the President and Hon. Secretary of the N.Z.I.A. under Bye-law 3 (*a*).

McGuinness: William, Dip. Arch. (Dunelm), (King's Coll. (Univ. of Durham), Newcastle-upon-Tyne, Sch. of Arch.), P.O. Box 890, Nairobi, Kenya. Prof. W. B. Edwards, S. L. Blackburne, G. B. E. Norburn.

MacCallum: Peter William Standish (Passed a qualifying examination approved by the R.A.I.A.), 227 New South Head Road, Edgecliff, Sydney, N.S.W., Australia. Prof. Leslie Wilkinson, E. L. Thompson, W. R. Richardson.

McClean: Euan Cameron (Passed a qualifying examination approved by the N.Z.I.A.), 28 Tawa Road, Onehunga, Auckland, S.E.5, New Zealand. Prof. A. C. Light, H. L. Massey, C. R. Ford.

Maddox: Herbert Victor [Final], c/o Messrs. H. G. Radford and Partners, P.O. Private Bag, Kampala, Uganda. G. M. Aylwin, R. D. Scott, A. J. Stedman.

Miller: Maxwell John (Passed a qualifying examination approved by the R.A.I.A.), 233 Bathurst Street, Hobart, Tasmania. Applying for nomination by the Council under Bye-law 3 (*d*).

Moore: John Wentworth (Passed a qualifying examination approved by the I.S.A.A.), 81 St. George's Street, Cape Town, S. Africa. James Morris, S. H. Todd, O. Pryce Lewis.

Munro: Robert Clarence (Passed a qualifying examination approved by the N.Z.I.A.), 93 Worcester Street, Christchurch, C.I., New Zealand. W. G. Young, and the President and Hon. Secretary of the N.Z.I.A. under Bye-law 3 (*a*).

O'Connor: Kenneth Stanley [Special Final], c/o Messrs. Watkins and Partners, 2 Treasury Street, Port of Spain, Trinidad, B.W.I. W. H. Watkins, R. F. Reekie, G. S. Bridgman.

Rix-Trott: Geoffrey Alwyn (Passed a qualifying examination approved by the N.Z.I.A.), 13 Warrington Road, Remuera, Auckland, New Zealand. C. R. Ford, M. K. Draffin, H. L. Massey.

Rutt: Walter Bevan Charles (Passed a qualifying examination approved by the R.A.I.A.), Royal Insurance Building, 13 Grenfell Street, Adelaide, South Australia. L. Laybourne-Smith, P. R. Claridge, O. A. Yuncken.

Soltynski: Roman Marian (Passed a qualifying examination approved by the I.S.A.A.), Woodley Road, Plumstead, Cape Town, S. Africa. Prof. L. W. T. White, C. D. St. Leger, C. P. Walgate.

Steele: Reginald Goodman (Passed a qualifying examination approved by the R.A.I.A.), 150 Walkerville Terrace, Walkerville, Adelaide, South Australia. L. Laybourne-Smith, J. L. S. Mansfield, Leighton Irwin.

Suthar: Balashankar Tuljaram Khadkiwala [Special Final], Kothi Road, Baroda, India. Prof. W. G. Holford, G. B. Deolaliker, Prof. Claude Batley.

Vos: Cedric James (Passed a qualifying examination approved by the I.S.A.A.), c/o Messrs. Greatbatch and Timlin, P.O. Box 195, Kimberley, S. Africa. Prof. L. W. T. White, D. R. Harper, O. Pryce Lewis.

Obituaries

Frederic Quy [*Ret.* M.S.A.] died in South Africa on 12 November 1948, aged 86. He was trained in London and went to South Africa in 1889. He was with George E. Gray, a Johannesburg architect, for a short time, and then returned to Cape Town, to which he had originally emigrated, and he there joined the Public Works Department of the Cape Colony at Cape Town in an architectural capacity. After the establishment of the Union of South Africa he was transferred in 1917 by the South African Government to King William's Town, which was the head office of the P.W.D. district in the Eastern Cape Province, where he was in charge until his retirement in 1923.

Ernest Edward Bentley [*L*], who died on 1 February last, was born in 1871 and was trained with an architect in Louth, Lincs, before going to practise as an assistant in Grimsby. From 1900 to 1914 he was in partnership at various times in Grimsby, but in 1914 started practice on his own account in Louth, where he practised ever since. Whilst in Grimsby he was the architect of the Imperial Hotel, Queen's Hotel and various schools and other buildings, and later, when practising in Louth, he designed the Mablethorpe R.C. Church. His work was mostly industrial and domestic architecture.

Werner Pfister (*Hon. Corresponding Member, Switzerland*) was born in 1884 and died on 11 February. He founded the architectural firm of Gebrüder Pfister in 1907 with his brother Otto and was responsible for the design of many houses in the Zürich district, school buildings in Zürich, Altstetten and Meggen, the Zürich-Enge railway station, the Swiss Life Insurance Institution, Alpenquai and several other administrative and official buildings in Zürich.

He was tall and distinguished-looking, bearded and had humorous eyes. Energetic and independent in outlook he was self-critical in his work and very popular with his Swiss professional colleagues, taking an active part in professional and public life. He had been ill for some time before his death.

Richard Jowett Edmondson [*L*] was trained in Bradford and later served for a short period with the Admiralty at Sheerness Dockyard. He was a partner with Mr. Benjamin Chippindale [*F*] in the firm of Chippindale and Edmondson, of Bradford, from 1914 to 1944, when he retired from the partnership. His architectural work in Bradford was mainly concerned with local industry.

Mr. Edmondson was a member of the West Yorkshire Society of Architects' Council from 1928-40, and Chairman of the Bradford Branch of that Society from 1936-38, being also from 1934-35 President of the Bradford Society of Architects and Surveyors.

He died on 23 February last, aged 69.

Mr. Benjamin Chippindale [*F*] carries on the practice as Chippindale and Edmondson at Dale Chambers, Bradford.

Pascal J. Stienlet [*F*], who died on 13 April, senior partner with Mr. V. G. Stienlet [*L*] in the firm of Pascal J. Stienlet and Son, had been in practice in Newcastle and North Shields for nearly 50 years, was a pioneer in British cinema design and was the architect of over a hundred cinemas and theatres throughout the country, but principally in the North of England. These ranged from his earliest project of Black's Northern Theatres, Ltd., to the Majestic in City Square, Leeds. Tyneside cinemas designed by him include the Scala and the Queen's, South Shields, and the Apollo, Newcastle.

A native of North Shields, he was also the architect for numerous ecclesiastical and school buildings, especially in the Roman Catholic diocese of Hexham and Newcastle. Besides his son, Mr. V. G. Stienlet, he leaves a widow and two daughters.

Members' Column

This column is reserved for notices of changes of address, partnership and partnerships vacant, or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr. M. K. Jadhav [*F*] has been appointed Architect to the Bombay Government with effect from 10 November 1949, and will be pleased to receive trade catalogues etc. addressed to him at the Public Works Department Secretariat, Fort Bombay, India.

Mr. Kenneth Pitchford [*A*] has been appointed Chief Assistant Architect in the City Surveyor's Department, Bradford. He retains his former status of Senior Town Planning Assistant in that City. Official correspondence should be addressed Chief Architect, City Surveyor's Department, Town Hall, Bradford.

PRACTICES AND PARTNERSHIPS

The firm of **Bailey and Walker** (**Mr. Lionel Bailey** and **Mr. P. Russell Walker** [*A*]), of Westminster Chambers, 7 Victoria Street, London, S.W.1 (ABBey 5405), have now an office at 150b High Street, Colchester, Essex (Colchester 2122).

Mr. Ernest A. Chilton, F.R.I.C.S. [*F*], of Loxfield Chambers, Uckfield (Uckfield 62), has taken into partnership Mr. Waters, a chartered surveyor. They now practise under the style of **Chilton and Waters** at Loxfield Chambers, Uckfield.

Mr. Wm. Leighton Gibbins [*A*] has commenced practice at 3 Northernhay Place, Exeter (Exeter 56135), and will be pleased to receive trade catalogues etc.

Mr. J. Everett Hartley [*L*] has taken into partnership **Mr. H. Neil Hartley** [*A*], and will continue to practise at Swadford Chambers, Skipton, under the present style of **James Hartley and Son.**

Mr. J. Kennedy Hawkes [*A*], of 51 High Street, Esher (Esher 1142), has opened an additional office at 119 Victoria Street, London, S.W.1 (VICtoria 7462), and will be pleased to receive trade catalogues etc.

Mr. F. A. Hodgson and **Miss Freda M. Tritton** [*A*/*A*] have commenced practice at P.O. Box 3859, Nairobi, Kenya Colony, East Africa, and will be pleased to receive trade catalogues etc.

Mr. James Jennings [*L*], until recently practising as **Jennings and Stables**, has taken into partnership **Mr. John C. Gill** [*A*]. They will practise under the style of **Jennings and Gill** [*L*/*A*] at Market Place, Ambleside, Westmorland (Ambleside 152).

As from 1 January 1950, **Mr. Victor C. L. Saunders** [*A*] and **Mr. Mervyn K. Reiss-Smith** [*L*], while continuing in partnership for the completion of certain works, have by mutual consent commenced practice separately. **Mr. Saunders** is practising at 1 Sussex Street, Plymouth (Plymouth 2458), and **Mr. Reiss-Smith** at 70 Hill Park Crescent, North Hill, Plymouth, until 25 June, after which date he is transferring his office to 31 Athenæum Street, Plymouth (Plymouth 5469 and 60704). **Mr. Roy S. Northmore** [*L*] has commenced practice on his own account at 59 Emma Place, Stonehouse, Plymouth (Plymouth 60745).

Mr. E. Stephen Wright [*A*], who has started his own practice at 150 Upper Fifth Street, Umtali, Southern Rhodesia, will be pleased to receive trade catalogues etc. at P.O. Box 320, Umtali, S. Rhodesia.

CHANGES OF ADDRESS

Mr. J. R. Boyd Barrett, F.R.I.A.I. [*A*], has removed his office to 5 Camden Place, Cork. The telephone number Cork 20955 remains unchanged.

Mr. C. B. Moss [*A*] and **Mrs. Marie Pauline Moss** [*A*] announce their new private address as 19 Wallace Street, Moorooka, Brisbane, Queensland.

Mr. Frank Scarlett [*F*] moved his office on 25 March 1950 from 11 Upper Grosvenor Street, London, W.1, to 18 Mansfield Street, London, W.1 (LANgham 5441).

Mr. H. G. A. Waldron [*L*] has removed to 17 Chapel Place, Ramsgate, Kent (Ramsgate 623), and will be pleased to receive trade catalogues etc.

PRACTICE AVAILABLE

Old-established practice in the West Riding of Yorkshire for sale, owing to death of Fellow. This is an extensive, varied and interesting practice, including church and school work. Box 26, c/o Secretary, R.I.B.A.

WANTED

Wanted. One copy of each of the July and August, 1948, numbers of the ARCHITECTURAL FORUM, in good condition. Box 27, c/o Secretary, R.I.B.A.